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Arcata General Plan: 2020 and Local Coastal Land Use Plan

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ARCATA GENERAL PLAN: 2020

TABLE OF CONTENTS

	PAGE
Introduction	I-1
Chapter 1 Community Vision Statement	1-1
Chapter 2 Community Development	
<u>Land Use Element</u>	
2.1 Introduction	2-1
2.2 Policies	2-6
Policy LU-1 Overall Land Use Pattern: Land Use Plan Map	2-6
Policy LU-2 Residential Land Use	2-8
Policy LU-3 Commercial Land Use	2-11
Policy LU-4 Industrial Land Use	2-14
Policy LU-5 Public Facilities	2-17
Policy LU-6 Agricultural and Natural Resource Lands	2-18
2.3 Implementation Measures	2-22
<u>Growth Management Element</u>	
2.4 Introduction	2-23
2.5 Policies	2-28
Policy GM-1 Planning Area	2-28
Policy GM-2 Sphere of Influence	2-29
Policy GM-3 Annexations	2-31
Policy GM-4 Urban Services and Urban Services Boundary	2-33
2.6 Implementation Measures	2-34
<u>Transportation Element</u>	
2.7 Introduction	2-35
2.8 Policies	2-49
Policy T-1 Balanced Transportation System with Choice of Modes	2-49
Policy T-2 HSU Travel Demand Management	2-50
Policy T-3 Bus Transit Policy	2-51
Policy T-4 Streets and Highways Plan and Policy	2-54
Policy T-5 Bicycle and Pedestrian Facilities	2-58
Policy T-6 Parking Supply and Parking Management	2-63
Policy T-7 Rail and Freight Transportation	2-64
Policy T-8 Financing Transportation Improvements	2-65
2.9 Implementation Measures	2-68

	PAGE
<u>Public Facilities & Infrastructure Element</u>	
2.10 Introduction	2-69
2.11 Policies	2-73
Policy PF-1 Water Supply and Delivery	2-73
Policy PF-2 Wastewater Collection, Treatment and Disposal	2-74
Policy PF-3 Stormwater Management	2-76
Policy PF-4 Educational Facilities	2-77
Policy PF-5 Public Facilities	2-79
Policy PF-6 Integrated Waste Management	2-80
2.12 Implementation Measures	2-82

Chapter 3 Housing and Human Services

Housing Element (Adopted 1/6/93) is bound in a separate document.

Parks and Recreation Element (Adopted 11/16/94) is bound in a separate document.

Chapter 4 Environmental Quality and Management

<u>Open Space Element</u>	
4.1 Introduction	4-1
4.2 Policies	4-3
Policy OS-1 Overall Open Space System	4-3
Policy OS-2 Natural Resources Protection and Enhancement	4-5
Policy OS-3 Open Space for Managed Production of Resources	4-6
Policy OS-4 Open Space for Outdoor Recreation/ Coastal Access	4-7
Policy OS-5 Open Space in Health and Safety Hazard Areas	4-7
4.3 Implementation Measures	4-8
<u>Resource Conservation & Management Element</u>	
4.4 Introduction	4-9
4.5 Policies	4-15
Policy RC-1 Natural Biological Diversity/ Ecosystem Function	4-15
Policy RC-2 Streams Conservation & Management	4-19
Policy RC-3 Wetlands Management	4-21
Policy RC-4 Open Waters of Arcata Bay & Tidelands	4-26
Policy RC-5 Agricultural Resources Management	4-30
Policy RC-6 Forest Resources Management	4-31
Policy RC-7 Water Resources Management	4-33
Policy RC-8 Energy Resources Management	4-34
Policy RC-9 Soils and Mineral Resources	4-36
4.6 Implementation Measures	4-37

PAGEAir Quality Element

4.7 Introduction	4-39
4.8 Policies	4-43
Policy AQ-1 Point and Area Sources of Air Pollutants	4-44
Policy AQ-2 Mobile Sources of Air Pollutants	4-45
Policy AQ-3 Regional Air Quality Standards, Monitoring and Education	4-48
Policy AQ-4 Odor	4-49
4.9 Implementation Measures	4-50

Chapter 5 Design & Historical PreservationDesign Element

5.1 Introduction	5-1
5.2 Policies	5-2
Policy D-1 Overall Community Design Character	5-2
Policy D-2 Downtown (Central-Commercial) Design	5-4
Policy D-3 Scenic Routes, Resources and Landscape Features	5-8
Policy D-4 Subdivision Design	5-10
Policy D-5 Residential Design	5-12
Policy D-6 Design of Commercial and Industrial Development	5-14
Policy D-7 Landscape Design	5-16
5.3 Implementation Measures	5-18

Historical Preservation Element

5.4 Introduction	5-19
5.5 Policies	5-21
Policy HP-1 Historic Landmarks	5-21
Policy HP-2 Noteworthy Structures	5-23
Policy HP-3 Arcata Plaza Area Historic District	5-25
Policy HP-4 Neighborhood Conservation Areas (NCAs)	5-27
Policy HP-5 Controls on Demolitions of Structures	5-28
Policy HP-6 Public Participation, Information and Education Policy	5-32
Policy HP-7 Archaeological and Cultural Resources	5-33
5.6 Implementation Measures	5-37

Chapter 6 Health & SafetyPublic Safety Element

6.1 Introduction	6-1
6.2 Policies	6-4
Policy PS-1 Emergency Preparedness	6-4
Policy PS-2 Seismic Hazards	6-6

Policy PS-3 Other Geologic Hazards	6-8
Policy PS-4 Flood Hazards	6-11
Policy PS-5 Fire Hazards	6-13
Policy PS-6 Hazardous Materials	6-14
Policy PS-7 Crime Prevention and Response	6-16
Policy PS-8 Human Health Hazards	6-17
6.3 Implementation Measures	6-19
 <u>Noise Element</u>	
6.4 Introduction	6-21
6.5 Policies	6-29
Policy N-1 Noise Attenuation	6-30
Policy N-2 Stationary Noise Sources and Levels	6-30
Policy N-3 Transportation Noise Sources and Levels	6-32
Policy N-4 Acoustical Analysis Requirements	6-33
Policy N-5 Intrusive and Intermittent Noise Sources	6-34
6.6 Implementation Measures	6-35
 Glossary	 G-1

LISTS OF FIGURES AND TABLES

#	FIGURE TITLE	PAGE
I-a	General Plan Organization	I-5
I-b	Arcata Neighborhoods	I-7
LU-a	Land Use Map	Map Pocket
LU-b	City, Sphere of Influence and Planning Area	2-3
GM-a	Urban Services Boundary/ City Limits	2-25
T-a	Street Functional Classifications	2-37
T-b	Key Intersections	2-40
T-c	Traffic Volumes	2-42
T-d	A&MRTS Transit Routes	2-53
T-e	Bikeway Map	2-59
T-f	Freight and Rail Routes	2-66
PF-a	School Districts	2-78
OS-a	Open Space Plan Map	Map Pocket
RC-a	Protected Watercourses	4-10
HP-a	Arcata Plaza Historic District	5-26
HP-b	Historic Landmarks & Neighborhood Conservation Areas	5-29
HP-c	Bayside Specific Plan District	5-31
PS-a	Hazards	Map Pocket
N-a	A World of Noise	6-23
N-b	Projected Future Noise Contours	6-25
N-c	Noise Control Measures	6-29

#	TABLE TITLE	PAGE
I-1	Coastal Policy Matrix	I-11
LU-1	Land-use Plan Categories and Acreages	2-7
LU-2	Residential Land Use Classifications	2-10
LU-3	Specific Considerations for Certain Residential Areas	2-10
LU-4	Commercial Land Use Classifications	2-12
LU-5	Specific Considerations for Certain Commercial Areas	2-14
LU-6	Industrial/Public Facility Land Use Classifications	2-15
LU-7	Specific Considerations for Certain Industrial Areas	2-17
LU-8	Specific Considerations for Certain Public Facility Areas	2-18
LU-9	Agricultural and Natural Resource Land Use Classifications	2-20
T-1	Level of Service Definition for Intersections	2-41
T-2	Afternoon Peak Hour Intersection Service Levels	2-43
T-3	A&MRTS Ridership Summary: Existing & Projected	2-45
T-4	Passive and Restrictive Traffic Calming Measures	2-59
T-5	Sidewalk Functional Width Requirements	2-65

#	TABLE TITLE	PAGE
AQ-1	Ambient Air Quality Standards for PM-10 Emissions	4-40
AQ-2	PM-10 Measurements in the Arcata/Eureka Area	4-40
AQ-3	General Emissions Sources & Contribution to Various Pollutants	4-42
AQ-4	Significant Emission Rates for Stationary Sources (tons/year)	4-42
AQ-5	NCUAQMD (North Coast Unified Air Quality Management District) Control Measures	4-43
HP-1	Designated Historic Sites List	5-35
PS-1	Geological Hazard Land Use Matrix	6-9
N-1	Noise Standards For New Projects and Retrofits	6-31
N-2	Maximum Allowable Transportation Noise Sources Exposure	6-32

INTRODUCTION

The Arcata General Plan: 2020 will help shape how the city of Arcata will look, function, provide services, and manage resources for the next 20 years. The plan is the City's "constitution" for physical development and change within the existing and future city boundaries. The plan is a legal mandate that governs both private and public actions. The general plan is atop the hierarchy of local government laws regulating land use. Other laws and policies, such as specific plans, subdivision regulations, and the zoning ordinance are subordinate to, and must be consistent with, the general plan. Comprehensive in scope, the plan conveys the fundamental values that public decision-makers will use to guide the City's evolution, from its physical development to the ever-changing network of services provided to its citizens.



AUTHORITY AND PURPOSE OF THE GENERAL PLAN

California State law requires cities and counties to prepare and adopt a general plan. The Government Code Sections requiring general plans are listed and summarized in the box on the following page.

PLANNING COMMISSION & CITY COUNCIL REVIEW & ADOPTION

The City of Arcata Planning Commission conducted public hearings and reviewed the Draft General Plan prepared at the direction of the City's General Plan and Specialized Task Forces. They forwarded a Planning Commission Draft to the City Council. After conducting their own public hearings, the Council adopted this General Plan on October 4, 2000.

Government Code § 65300. Each planning agency shall prepare and the legislative body of each county and city shall adopt a comprehensive, long-term general plan.

Government Code § 65300.5. The Legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.

Government Code § 65300.7. Requires planning agencies and legislative bodies to implement this article in ways that accommodate local conditions and circumstances, while meeting minimum requirements.

Government Code § 65302. The general plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals. The plan shall include the following elements:

Land Use	Circulation	Open Space	Safety
Housing	Conservation	Noise	

Government Code § 65303. The general plan may include any other elements or address any other subjects which, in the judgment of the legislative body, relate to the physical development of the county or city.

California Coastal Act. Public Resources Code § 3000 et. seq. The General Plan must comport with legislative policies relating to the California Coastal Act (see box on next page).

LOCAL COASTAL LAND USE PLAN

A large portion of Arcata lies within the California Coastal Zone. The Coastal Act of 1976 requires the City to have a Local Coastal Program certified by the State Coastal Commission. The Local Coastal Program consists of two parts. The first part is the Coastal Land Use Plan comprised of goals and regulatory policies. The second part is a set of implementing ordinances to carry out the policies of the Coastal Land Use Plan. The Arcata General Plan: 2020 is a combined document meeting both the State General Plan requirements and serving as the Coastal Land Use Plan portion of the City's Local Coastal Program [LCP]. Policies which are a part of the LCP are designated with a wave symbol. 

Chapter three of the Coastal Act, "Coastal Resource Planning and Management Policies," provides the standards for the review and certification of the Coastal Land Use Plan. These standards are briefly summarized in the following box. A matrix (Table I-1 Coastal Policy Matrix) located at the end of the Introduction lists Coastal Land Use Plan policies, together with the specific Coastal Act requirements to which each policy is addressed. Various plan maps and diagrams throughout the plan show the boundary of the Coastal Zone.

California Coastal Act

The Coastal Act's policies guide coastal zone conservation and development decisions to protect California's coastal resources and provide for their wise use. These state policies call for:

- Providing for maximum public access to and recreational use of the coast, consistent with private rights and environmental protection.
- Protecting marine and land resources- including wetlands, rare and endangered habitat areas, environmentally sensitive areas, tidepools, and stream channels.
- Maintaining productive coastal agricultural lands.
- Directing new housing and other development to urbanized areas with adequate services rather than allowing a scattered, sprawling, wasteful pattern of subdivision.
- Protecting the scenic beauty of coastal landscape.
- Locating any needed coastal energy and industrial facilities where they will have the least adverse impact.
- Designating coastal dependent development, where appropriate.

ORGANIZATION OF THE PLAN

The Arcata General Plan 2020 consists of six chapters which arrange thirteen elements into related groups, as shown in Figure I-a. In addition to the seven required elements identified in Government Code § 65302, this General Plan includes six optional elements:

Growth Management (Chapter 2)

Air Quality (Chapter 3)

Public Facilities and Infrastructure (Chapter 2)

Design (Chapter 5)

Parks and Recreation (Chapter 3)

Historical Preservation (Chapter 5)

The required Housing Element and the optional Parks and Recreation Element were not revised as part of this update. The Housing Element (adopted January 6, 1993) and Parks and Recreation Element (adopted November 16, 1994) are in separate documents.

Each element begins with an introduction, which includes an overview, guiding principles and goals. The introduction is followed by a detailed policy section and concludes with a section identifying implementation measures which require future actions. All elements have equal weight under the law and are designed to be consistent with each other.

The previous comprehensive update of the General Plan was completed over twenty years ago. Since that time, several of the elements were individually updated and several implementing plans have been adopted by the City. These implementing plans include:

Community Forest Management Plan
Drainage Master Plan

Creeks Management Plan
Source Reduction and Recycling Element

PUBLIC PARTICIPATION IN CREATING THE PLAN

Preparation of this General Plan was a community effort, guided initially by General Plan Task Forces. Task Force-sponsored neighborhood forums, and a community-wide “visioning” and goal-setting workshop were held to collect community input. Community representatives, especially the 34 members of the General Plan Task Force and three specialized Task Forces (Environmental Policy, Health and Safety, and Design and Historical Preservation) volunteered countless hours throughout the phases of the plan’s preparation. The final adopted plan followed numerous public hearings by the Planning Commission and City Council, where additional community input was received and incorporated.

The City of Arcata made General Plan preparation an open process with many opportunities for review and comment. Opportunities for public participation were incorporated into all phases of the General Plan’s progress. Public participation was initiated by appointment of citizens to the General Plan and Specialized Task Forces. This was followed by five neighborhood forums, held in November and December of 1996, to gather citizen input. A community-wide workshop, held in April, 1997, and attended by more than 130 community members, helped to define goals and overall direction. The Task Forces held more than 100 regular meetings, all open to the public.

The four Task Forces convened regularly to complete a Preliminary Draft of the General Plan, which was submitted to the Planning Commission and the City Council, in April 1998. The Commission and the Council held a General Plan study session in April 1998 to review Task Force recommendations, after which the Preliminary Draft Plan was the subject of public review and discussion at two neighborhood workshops in May and June. The Task Forces reviewed input from these workshops and completed their revisions to be incorporated into the public hearing draft of the General Plan. The Public Hearing Draft, along with an Environmental Impact Report, was completed in September 1998.

The Planning Commission (pictured, from left to right: Jack Hitt, Aldaron Laird, Carlol Dellabalma, John Graves, Elizabeth Conner, Robert Fllint, and Ann King Smith) conducted hearings for the General Plan starting in early 1999.

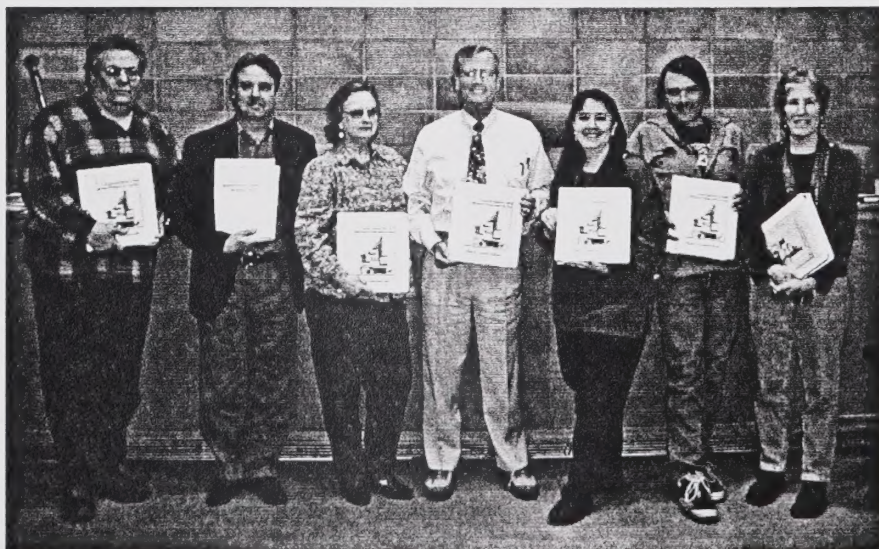
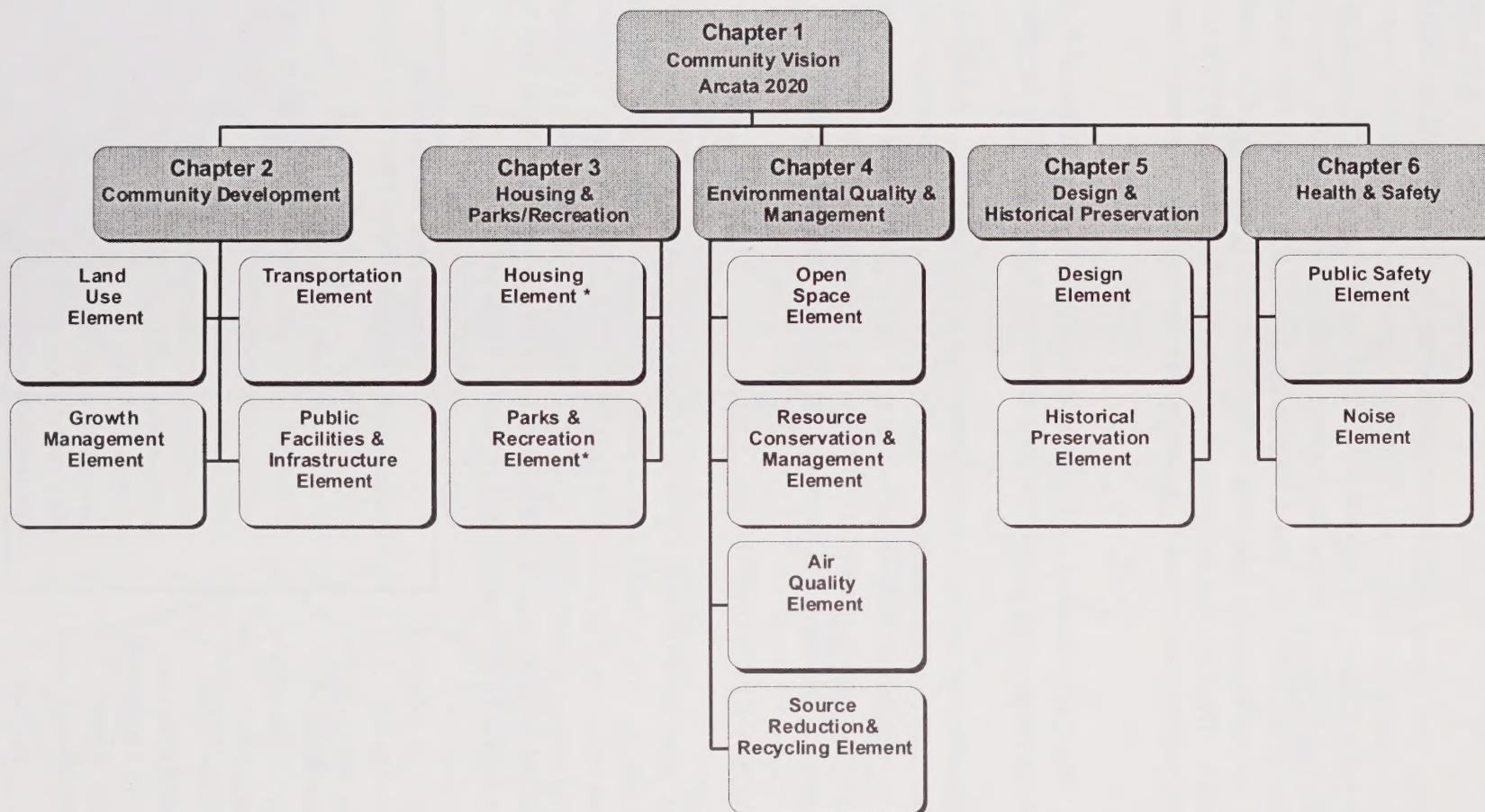


FIGURE I - a GENERAL PLAN ORGANIZATION



* - Elements not being updated

REGIONAL AND LOCAL SETTING

Regional Setting. The City of Arcata is located on the Northern California coast, 275 miles northwest of San Francisco, in the heart of the redwood region. It is in the west-central portion of Humboldt County, six miles north of the City of Eureka, the County seat. Arcata is situated at the north end of Arcata Bay, which is part of Humboldt Bay, the second largest marine embayment in California. The City is located on U.S. Highway 101, which connects to Eureka and the San Francisco Bay Area to the south, and to Crescent City and the Oregon Coast to the north. The City is at the western terminus of State Highway 299, which connects Arcata and the north coast to Redding and the Upper Sacramento Valley to the east.

Local Setting. The City is situated on a coastal terrace, the lower portions of Fickle Ridge and the easterly portions of the Arcata Bottom, between Arcata Bay and the Mad River.

Arcata's Neighborhoods. Arcata is a city comprised of several distinct neighborhoods and recognized community areas. While the Plaza is the commercial, cultural, social, and civic center of activity, residential neighborhoods and employment centers offer unique living, working, shopping, learning, recreation, and community opportunities and facilities. Figure I-b shows the general locations and names of the City's varied neighborhoods.

FUTURE TRENDS AND ASSUMPTIONS

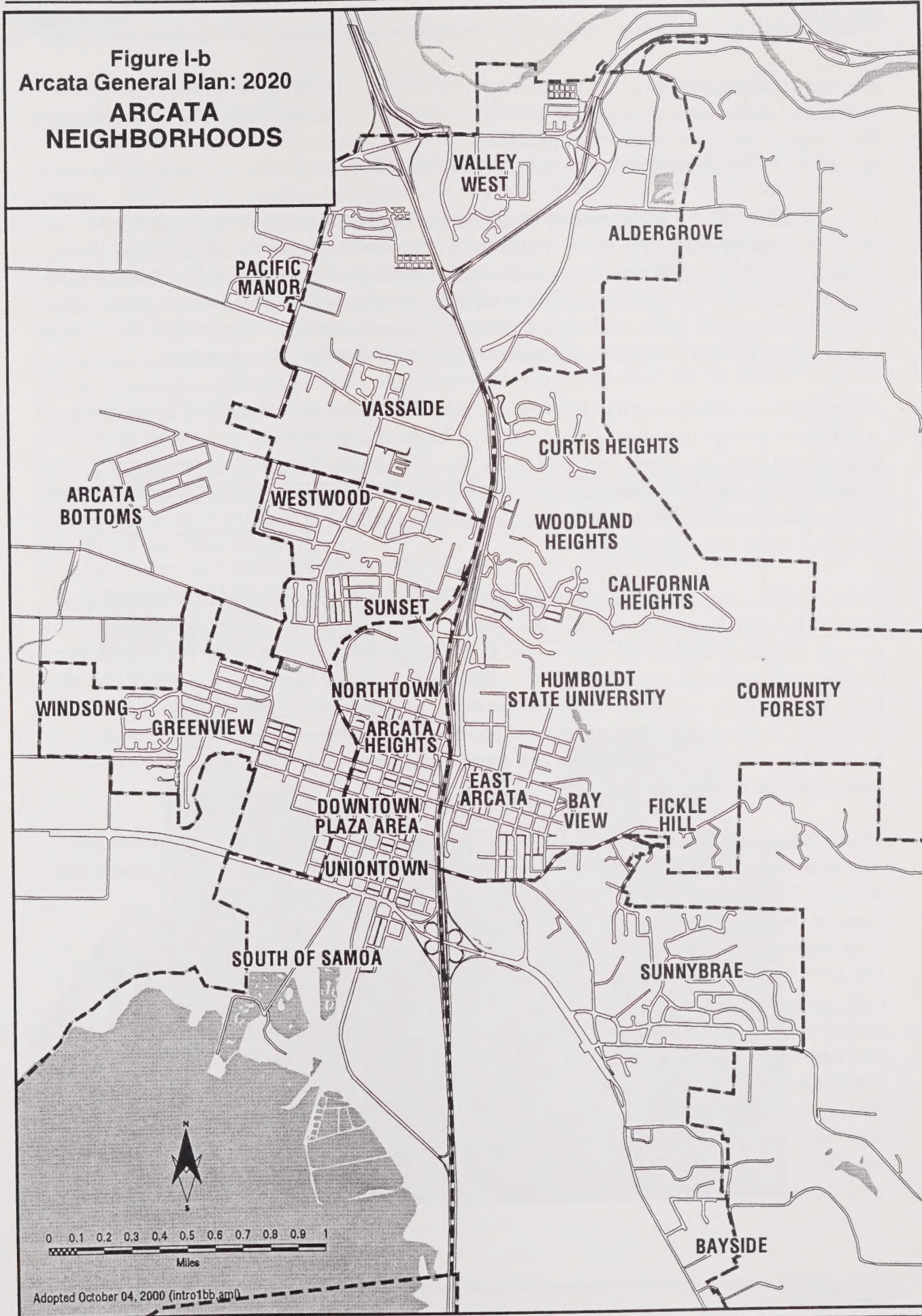
The last twenty years have brought significant changes to Arcata and further changes seem certain for the future. The Arcata General Plan: 2020 includes goals, policies and implementation measures that anticipate and help shape those changes, to ensure that they reflect the community's shared sense of values. Future trends may reflect changes in social, economic, cultural, and environmental factors that come from both inside and outside, but will be shaped locally by the guidelines expressed in this plan.

The most significant ongoing trends concern Arcata's working, living, learning and natural environments. For example, most of the large-scale timber-industry employers are now gone. Today's Arcatans are more likely to work for Humboldt State University, a small employer, or to be self-employed.

General Plan Assumptions

1. Modest growth from 16,400 in 1997, to a 2020 population of about 20,000.
2. No new large-scale employers.
3. Continue to be a City where HSU, health providers, education facilities, small-scale manufacturing, agricultural, and retail trade are the primary employers.
4. HSU will operate year-round instruction and enrollment will increase from 7,500 in 1997 to 8,500 full-time equivalent students in 2020.
5. Infrastructure will be limited.
6. The Coastal Zone, resource constraints, and greenbelt will limit outward expansion.

**Figure I-b
Arcata General Plan: 2020
ARCATA
NEIGHBORHOODS**



In terms of physical development patterns, it is expected that there will be increased use of vacant and underdeveloped parcels within City limits as opposed to outward expansion. The Growth Management Element establishes an Urban Services Boundary that limits the extension of City services and outward growth of the City.

Transportation and other community infrastructure systems are expected to increase in efficiency, due to changes in travel choices and improved management of facilities. The General Plan emphasizes non-motorized vehicle connections throughout the city and more efficient transit service to reduce reliance on single-occupancy vehicles. Water, wastewater, energy conservation, and source reduction measures will minimize the need for increases in infrastructure capacity and promote more efficient operation of existing systems.

Protection and enhancement of the natural environment and preservation of open space will continue to be high priorities. Creek, wetland, bayland and tideland, agriculture, forest, soil and mineral resource issues, and the broader issue of natural biological diversity and ecosystem function, are specifically addressed in the General Plan. The protection of open space within the City and an agricultural and forest greenbelt around the City are integral to the future form of the City.

Reduced air, water, and noise pollution, along with increased protection from natural and man-made hazards, are expected in the future. Emergency preparedness will increase through neighborhood-based efforts such as the Neighborhood Emergency Services Teams (NEST), and improved coordination with emergency response agencies. California's North Coast is seismically active and care must be taken to avoid unnecessary human exposure to hazardous and unstable areas. Improved identification of these areas, and construction methods to increase stability of new and retrofitted structures, will help minimize risks and reduce potential damage.

The architectural diversity and historic structures that form Arcata's special ambience and character are important community assets to be preserved for the future. The General Plan includes Design and Historical Preservation Elements that provide guidelines for compatible design and resource protection. The Design Element is intended to ensure community diversity and quality in the built environment, with small-scale structures that are harmonious with their neighborhood context and natural settings. The Historical Preservation Element designates significant landmarks and sites that are representative of the City's various periods in social and physical development.



IMPLEMENTATION MEASURES

At the end of each element there is a list of measures that will implement General Plan policies. The implementation measures have an alpha-numeric reference corresponding to their related element. For example implementation measures related to the Land Use Element are labeled LU-1, LU-2, and so on. For each measure, a responsible party is identified and a time frame is given. Time frames are expressed as Year 1, Year 2, and so on, to indicate the year after General Plan adoption they are scheduled to be carried out. Some of the implementation measures are identified as ongoing. Many of the measures will be incorporated into the City's Land Use Code which will replace the Land Use and Development Guide (LUDG). These code amendments are all identified as Implementation Measure LU-1, as shown in the example below.

IMPLEMENTATION MEASURE

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
LU-1	Land Use Code Amendments Revise the City's Land Use Code (formerly the Land Use and Development Guide, or LUDG) zoning districts and land use regulations to be consistent with the General Plan land use designations, densities, and policies.	Community Development Department/ Planning Commission	Year 1



DEFINITION OF TERMS

The most frequently used General Plan terms are defined below. A more complete definition of terms may be found in the glossary.

- Goal** A general, overall, and ultimate purpose, aim, or end toward which the City will direct effort.
- Principle** An assumption, fundamental rule, or doctrine that will guide general plan policies, proposals, standards, and implementation measures. The State Government Code (§65302) requires that general plans spell out the objectives, *principles*, standards, and proposals of the general plan. “Adjacent land uses should be compatible with one another” is an example of a principle.
- Policy** A group of related actions or means that will be employed to achieve objectives.
- Objective** A specific measurable statement of desired future condition toward which a policy is directed. Where possible, objectives are time-specific. The State Government Code (§65302) requires that general plans spell out the *objectives*, principles, standards, and proposals of the general plan. “The addition of 100 units of affordable housing by 2005” is an example of an objective.
- Standard** A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. The State Government Code (§65302) requires that general plans spell out the objectives, principles, *standards*, and proposals of the general plan. Examples of standards might include: five acres of parkland per 1,000 population; the traffic Level of Service (LOS) C; or a residential density standard of two units per acre.
- Implementation Measure** Actions, procedures, programs, or techniques that carry out policies.
- Program** An organized activity carried out in response to adopted policy to achieve an objective. Programs establish the “who,” “how,” and “when” for carrying out the “what” and “where” of goals and objectives, subject to budgetary allocations of resources.

TABLE I - 1 COASTAL PLAN POLICY MATRIX

Note: the Coastal Act Requirements and General Plan Policies have been paraphrased for this table; please see text of the plan for complete language.

COASTAL ACT REQUIREMENTS			ARCATA LOCAL COASTAL LAND USE PLAN POLICIES		
Topic	Section	Requirements	Element	Policy	Policy Name
New Urban Development	30244	where development would adversely impact archeological or paleontological resources, reasonable mitigation measures shall be required	Historical Preservation	H-7a	Archaeological surface reconnaissance studies
			Historical Preservation	H-7b	Mitigation of potential archeological impacts
			Historical Preservation	H-7c	Monitoring of construction
			Historical Preservation	H-7d	Discovery of archaeological resources
	30250a	proximity of new urban development to existing development	Growth Management	GM-4a	Urban Services Boundary
			Public Facilities	PF-5b	City administrative and operation facilities
			Land Use	LU-2a	Residential land use classifications
	30250b	location of new hazardous industrial development	Land Use	LU-4a	Industrial uses
	30250c	visitor-serving facilities outside existing developed areas	Land Use	LU-3a	Commercial Land Use classifications
	30251	scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance	Open Space	OS-3b	Development limitations and management for productive resource areas
	30252	maintenance and enhancement of public areas through the amount and location of new development	Land Use	LU-1a	Land Use Plan diagram
	30255	priority of coastal dependant development over other development	Land Use Resource Conservation	LU-1g RC-4c	Coastal Dependent Land Uses Habitat value protection

TABLE I - 1 COASTAL PLAN POLICY MATRIX (continued)

Topic	Section	Requirements	Element	Policy	Policy Name
Public Access & Recreation	30210	access to recreational opportunities; conspicuously posting access entrance	Open Space	OS-4b	Coastal access policy
			Resource Conservation	RC-4b	Access to Arcata Bay
	30211	development not to interfere with the public's right of access to the sea	Resource Conservation	RC-4a	Protection of Arcata Bay open waters and mudflats
			Resource Conservation	RC-4f	Management of bayfront and marsh areas for coastal access, recreation and tourism
	30212	new development projects; provision for access from the nearest public roadway; exceptions	Resource Conservation	RC-4a	Protection of Arcata Bay open waters and mudflats
			Resource Conservation	RC-4f	Management of bayfront and marsh areas for coastal access, recreation and tourism
	30212.5	public works facilities distribution through out the area to mitigate against impacts	Land Use	LU-5a	Public Facility uses
			Resource Conservation	RC-4b	Access to Arcata Bay
			Resource Conservation	RC-4c	Coastal-dependant and public trust tidelands uses
			Resource Conservation	RC-4f	Management of bayfront and marsh areas for coastal access, recreation and tourism
	30213	lower cost visitor and recreational facilities protected, encouraged, and provided; encouragement and provision, overnight room rentals	Resource Conservation	RC-4b	Access to Arcata Bay
			Resource Conservation	RC-4c	Coastal-dependant and public trust tidelands uses
			Land Use	LU-3a	Commercial use classifications
	30214	implementation of public access policies for time, place, and manner of public access	Resource Conservation	RC-4b	Access to Arcata Bay

TABLE I - 1 COASTAL PLAN POLICY MATRIX (continued)

Topic	Section	Requirements	Element	Policy	Policy Name
Public Access & Recreation (continued)	30220	protection of certain water-oriented activities that are not suited for inland water	Resource Conservation	RC-4c	Coastal-dependant and public trust tidelands uses
	30221	oceanfront land suitable for recreational use and development shall be protected	Resource Conservation	RC-4c	Coastal-dependant and public trust tidelands uses
	30222	visitor-serving recreational facilities have a priority over private residential, general industrial or general commercial, but not over agriculture or coastal-dependant industry	Open Space	OS-2b	Development limitations and management for maintenance of biotic resources and diversity, including aquatic resources and sensitive habitats
	30222.5	oceanfront land suitable for aquaculture use and development shall be protected	Resource Conservation	RC-4e	Aquaculture and agricultural use of coastal wetlands and tidelands
	30223	upland areas necessary to support coastal recreational uses shall be reserved	Land Use	LU-5a	Public Facility Uses
	30224	encourage recreational boating use by developing boating facilities	Resource Conservation	RC-2c	Permitted uses and activities in streamside protection areas
			Resource Conservation	RC-4c	Coastal-dependant and public trust tidelands uses
			Resource Conservation	RC-4f	Management of bayfront and marsh areas for coastal access, recreation and tourism

TABLE I - 1 COASTAL PLAN POLICY MATRIX (continued)

Topic	Section	Requirements	Element	Policy	Policy Name
Water & Marine Resources	30230	marine resources shall be maintained, enhanced, and where feasible, restored; special protection shall be given to areas and species of special biological or economic significance	Resource Conservation	RC-1c	Habitat value protection
			Resource Conservation	RC-2c	Permitted uses and activities in streamside protection areas
			Resource Conservation	RC-2g	Maintenance of streams as natural drainage systems
			Resource Conservation	RC-4a	Protection of open waters and mudflat areas of Arcata Bay
			Open Space	OS-1a	Designation of native biotic resources & ecosystems
	30231	coastal waters maintenance to protect human health; maintain optimum marine organism populations; minimize adverse waste water, runoff, surface water effects.	Community Facilities	CF-2b	Arcata Marsh Wastewater treatment system
			Community Facilities	CF-2a	Capacity and management of city wastewater collection system
			Community Facilities	CF-3a	Utilization city streams and watercourses as natural drainage systems
			Community Facilities	CF-3b	Control of stormwater runoff, flooding and erosion
			Resource Conservation	RC-2c	Permitted uses in streamside protection areas
			Resource Conservation	RC-2g	Maintenance of streams as natural drainage systems
			Resource Conservation	RC-4c	Coastal-dependant & public trust uses of tidelands

TABLE I - 1 COASTAL PLAN POLICY MATRIX (continued)

Topic	Section	Requirements	Element	Policy	Policy Name
Water & Marine Resources (continued)	30233	diking, filling or dredging permitted where there is no feasible less environmentally damaging alternative; mitigation	Resource Conservation	RC-3b	Filling of wetlands
			Resource Conservation	RC-4d	Diking, dredging, filling, and shoreline structures
	30234	commercial fishing and recreational boating facilities protected and upgrade in accordance with demand	Resource Conservation	RC-2c	Permitted uses and activities in streamside protection areas
	30234.5	economic, commercial, and recreational importance of fishing shall be recognized and protected			
	30235	revetments, breakwaters, etc. permitted when designed to eliminate or mitigate adverse impacts			
Industrial Development	30240	environmentally sensitive habitat areas shall be protected against any significant disruption; adjacent developments shall be sited and designed to prevent impacts which would significantly degrade the area	Resource Conservation	RC-1c	Habitat value protection
			Land Use	LU-6a	Agricultural and Natural Resource classifications
			Open Space	OS-2b	Development limitations and management for maintenance of biotic resources and diversity, including aquatic resources and sensitive habitats
	30243	productivity of soils and timberlands protected; conversions	Resource Conservation	RC-2c	Permitted uses and activities in streamside protection areas

TABLE I - 1 COASTAL PLAN POLICY MATRIX (continued)

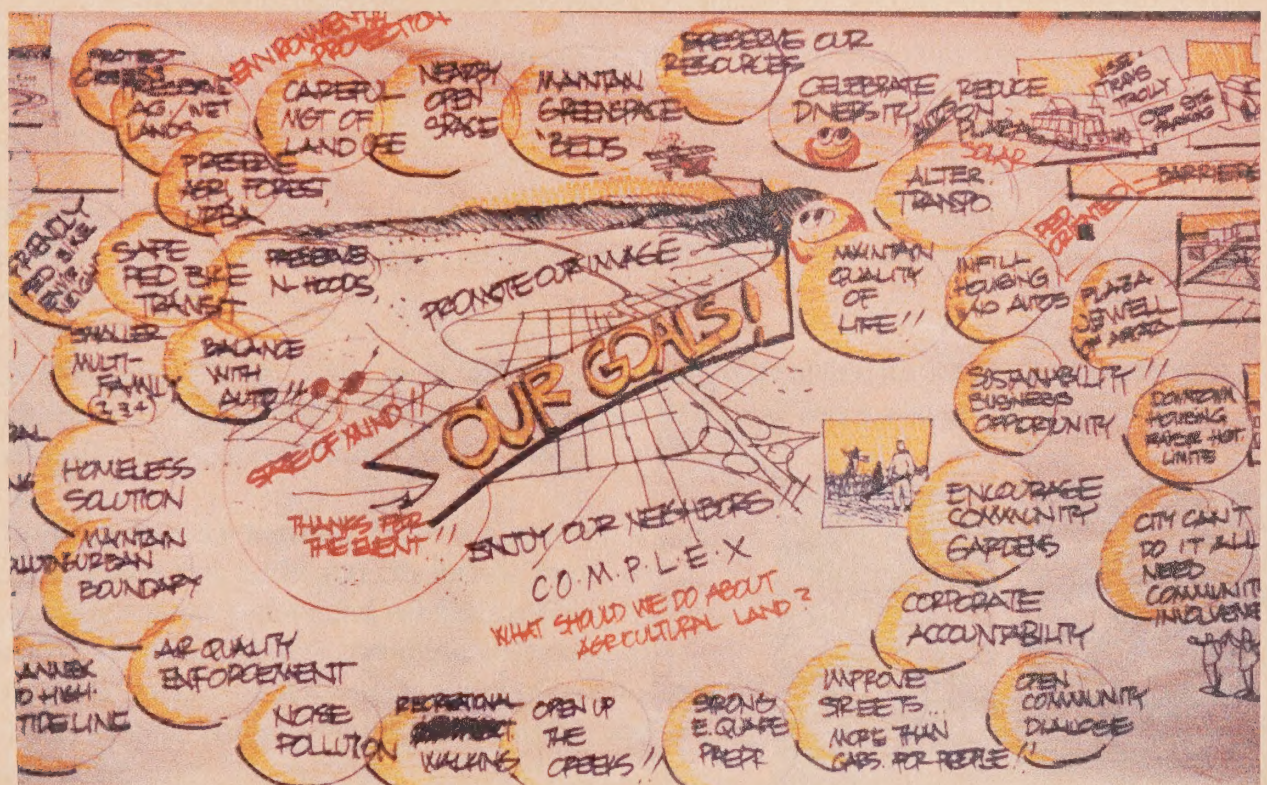
Topic	Section	Requirements	Element	Policy	Policy Name
Industrial Development	30260	location or expansion of coastal-dependant industrial facility	Land Use	LU-4a	Industrial uses
			Land Use	LU-4d	New business park
	30261	use of tanker facilities; natural gas terminals	Land Use	LU-4g	Coastal related resource extraction and processing
	30262	oil and gas development	Land Use	LU-4g	Coastal related resource extraction and processing
	30263	refineries or petrochemical facilities	Land Use	LU-4g	Coastal related resource extraction and processing
	30264	thermal electric generating plants	Land Use	LU-4g	Coastal related resource extraction and processing
	30265	offshore oil transport and refining	Land Use	LU-4g	Coastal related resource extraction and processing
	30265.5	coordination of offshore oil transport and refining activities	Land Use	LU-4g	Coastal related resource extraction and processing
Hazards	30232	oil and hazardous substance spills	Public Safety	PS-6d	Siting of facilities handling hazardous waste
	30236	alteration of rivers and streams permitted for water supply, flood control and improvement of marine habitat	Resource Conservation	RC-2c	Permitted uses and activities in streamside protection areas
	30253	safety, stability, pollution, energy conservation, visitors	Public Safety	PS-2a	Development within fault zone/ fault rupture areas
			Public Safety	PS-4c	Limitations on development within floodplains
			Open Space	OS-5a	Open space easements for safety hazard areas

Topic	Section	Requirements	Element	Policy	Policy Name
Agriculture	30241	maximize the amount of prime agricultural land maintained in agriculture production to assure the protection of the agricultural economy; conflicts minimized	Resource Conservation	RC-2c	Permitted uses and activities in streamside protection areas
			Resource Conservation	RC-4d	Diking, dredging, filling and shoreline structures
			Resource Conservation	RC-5a	Protection of agricultural lands and uses in the City
			Land Use	LU-1e	Protection of natural resources and agriculture lands
			Land Use	LU-6a	Agriculture & Natural Resource classifications
	30241.5	agricultural lands viability determination	Land Use	LU-6c	Protection of Agricultural lands and uses
	30242	lands suitable for agricultural conversions	Land Use	LU-6c	
Public Works	30254	new or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division	Resource Conservation	RC-4b	Access to Arcata Bay
			Resource Conservation	RC-4c	Coastal-dependant and public trust tidelands uses
			Resource Conservation	RC-4f	Management of bayfront and marsh areas for coastal access, recreation and tourism
			Growth Management	GM-4b	Services outside City boundary
			Growth Management	GM-4c	Requirements and procedures for modifying Urban Services Boundary
			Community Facilities	CF-1b	Capacity and management of city water system

Topic	Section	Requirements	Element	Policy	Policy Name
	30254.5	sewage treatment plants and conditions	Community Facilities	CF-2b	Arcata Marsh Wastewater treatment system
			Community Facilities	CF-2a	Capacity and management of city wastewater system

Chapter 1

Community Vision Statement



ARCATA COMMUNITY VISION

Arcata today: with its natural beauty, resourceful citizens, and exemplary quality of life, Arcata is more than just a great place to live. Arcata is home; a sanctuary and a work in progress.

Picture Arcata in the year 2020: growing more in stature than size, extending in opportunities, advancing thoughtfully. A safe and inspiring environment for people of all ages and stages. A city that works -- and a community that works even harder. Not an island separate from the world, but an oasis, offering a world of difference. Our choices make Arcata what it is and what it will be. Our decisions reach far beyond our own times, guiding Arcata towards a promising future.

We'll grow, but on our own terms. A modest growth rate, up to a population of around 20,000, will support and encourage economic viability, while maintaining our primary focus on community and manageability.

We build carefully. Arcata's environmentally conscious development guidelines, and surrounding permanent greenbelt, promote compact growth and resist the pressures for unplanned sprawl.

We live as neighbors. Safe, quiet, affordable housing is available for seniors and students, families and singles, people from every economic strata. All share a sense of community in distinctive, interconnected neighborhoods.

Our priorities are natural. From our agricultural lands to the community parks and city forests, from our exemplary marsh system and wildlife sanctuary to protected creek and river corridors, wetlands and tidelands, we pride ourselves on our continuing efforts to preserve the unique, natural beauty within and around the City.

We live resourcefully. Sustainability is a way of life. We reduce, reuse, and recycle, continually relearning and redefining as we better understand our local resource base. We are committed to living well, and within Arcata's resource base. Our water, wastewater, energy, and land use needs are monitored and adjusted, as we find new ways to minimize consumption. We conserve these resources so they may be enjoyed by the seventh generation.



We move forward. In Arcata, public and private transportation come in a variety of forms, and we seek out and use the least polluting, most efficient methods. People come first; bicycles, cars, trucks and transit vehicles share the road with us. Bikeways and pedestrian paths connect all parts of the City.

Our town is architecturally diverse. Arcata's urban and neighborhood character is enhanced by a diverse, architectural heritage. Our historic homes, classic commercial structures, craftsman cottages and contemporary buildings create a distinctive yet diverse character. New development complements the character of the neighborhood in which it is located.

We're drawn to the plaza. Our historic and distinctive downtown square remains the heart of Arcata. It is our common ground for community events, daily commerce, retail, restaurants and entertainment.



Our future is secure. Arcata's economy reflects the efforts of our many entrepreneurs, artisans and small businesses; the support of citizens who value local investment; and those who offer value-added products from locally available resources.

We share the benefits of Humboldt State University. The University, which offers continuing educational opportunities, cultural events and social activities for the entire region, is a stimulating presence and one of our community's most important assets.

We keep it healthful. Pollution prevention is ingrained in all City functions. Controls are well in place, along with continuing education and advancement regarding all aspects of public health, from clean air, water and soil, to seismic safety and quiet neighborhoods.

We are a community. Arcatans actively participate, and involve themselves in community events. Civic and government interest groups, all are open to, care enough to take activities, neighborhood and and perpetuated by, citizens who responsibility and work together.



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Chapter 2

Community Development

**Land Use Element
Growth Management Element
Transportation Element
Public Facilities and Infrastructure Element**



LAND USE ELEMENT

2.1 INTRODUCTION

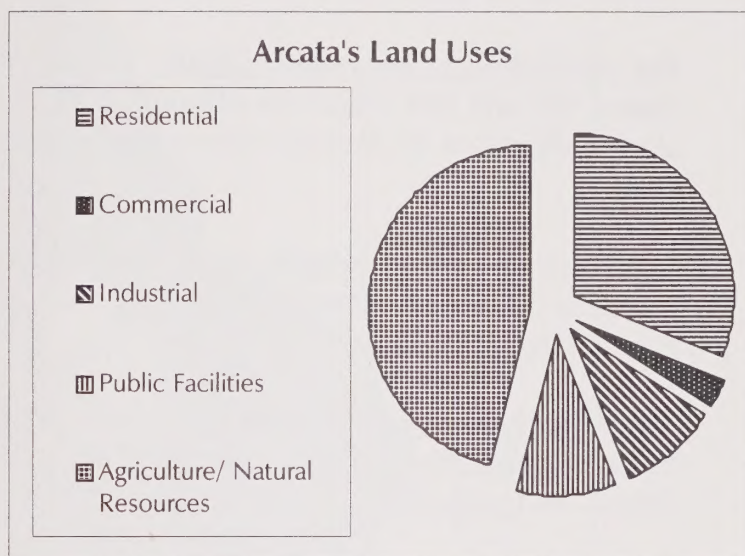
Overview of Existing Land Uses

and Resources. Arcata's land use patterns have been shaped by many factors and reflect more than one-hundred and forty years of community development. The early settlement of the town, initially called Uniontown, grew around a central plaza. Arcata's Plaza area, including a hotel, storehouse, and other commercial buildings, was originally constructed in the late 1800s and early 1900s and continues to be the center of the community. The timber industry also

left an indelible land use imprint on the community. Many of the lumber mills which operated in the late 1800s to mid 1900s, are now closed and the abandoned mill sites are undergoing a slow transformation to other uses. Humboldt State University occupies approximately 160 acres east of State Route 101, within walking distance of the downtown area. The northernmost campus in the California State University system, it is the community's major employer and regional education center for as many as 8,500 full-time equivalent students.

Long before Humboldt Bay was "discovered" by European-Americans, the bay and tidelands were used intensively by the Wiyot for food collection and as a site for villages. After early European settlement, Arcata's bayfront served as a community dock and shipping port. The Arcata marsh now functions as a world-renown wastewater treatment facility and wildlife refuge. Many residential areas of Arcata such as Sunset, Sunny Brae, Preston Ridge, and Bayside were developed while unincorporated, and then subsequently annexed to the City. Their lot sizes, subdivision designs, and street configurations reflect County, rather than City, development standards. These and other factors have influenced the existing land use characteristics of the community and will play an important role in shaping land use patterns for the future.

Arcata's residential, commercial, industrial, agricultural/natural resource, and community facility uses are similar to those found in other communities. It is Arcata's mixture of history, the diversity of uses within those land use categories, and the value placed on our history and diversity, that make the city unique. The Land Use Element contains goals, policies, and



implementation measures for each land use category. These are intended to guide future land use decisions, preserve important elements of the past, and maintain the present diversity of use and character. While the Plaza area is the commercial, cultural, social, and civic center of the community, there are several other distinct neighborhood activity centers that provide employment and services for local residents. These neighborhood centers are:

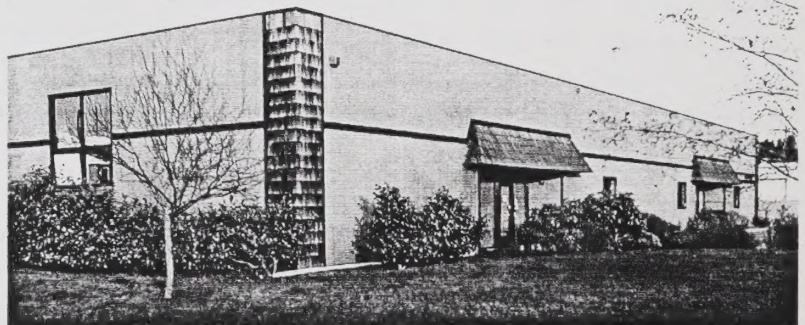
The Valley West Neighborhood Center, in the northern part of the City between State Routes 101 and 299. This area includes a shopping center, visitor-serving commercial areas along Valley West Boulevard, a mix of businesses along Giuntoli Lane, and nearby residential areas.

The Westwood/Sunset Neighborhood Center, in the western part of the City. It includes a shopping center and commercial businesses along Alliance Road, Sunset School, and surrounding residential areas.

The Sunny Brae Neighborhood Center, in the southwestern part of the City. This area includes Sunny Brae shopping center and adjacent professional offices, the Sunny Brae School, and surrounding residential areas.

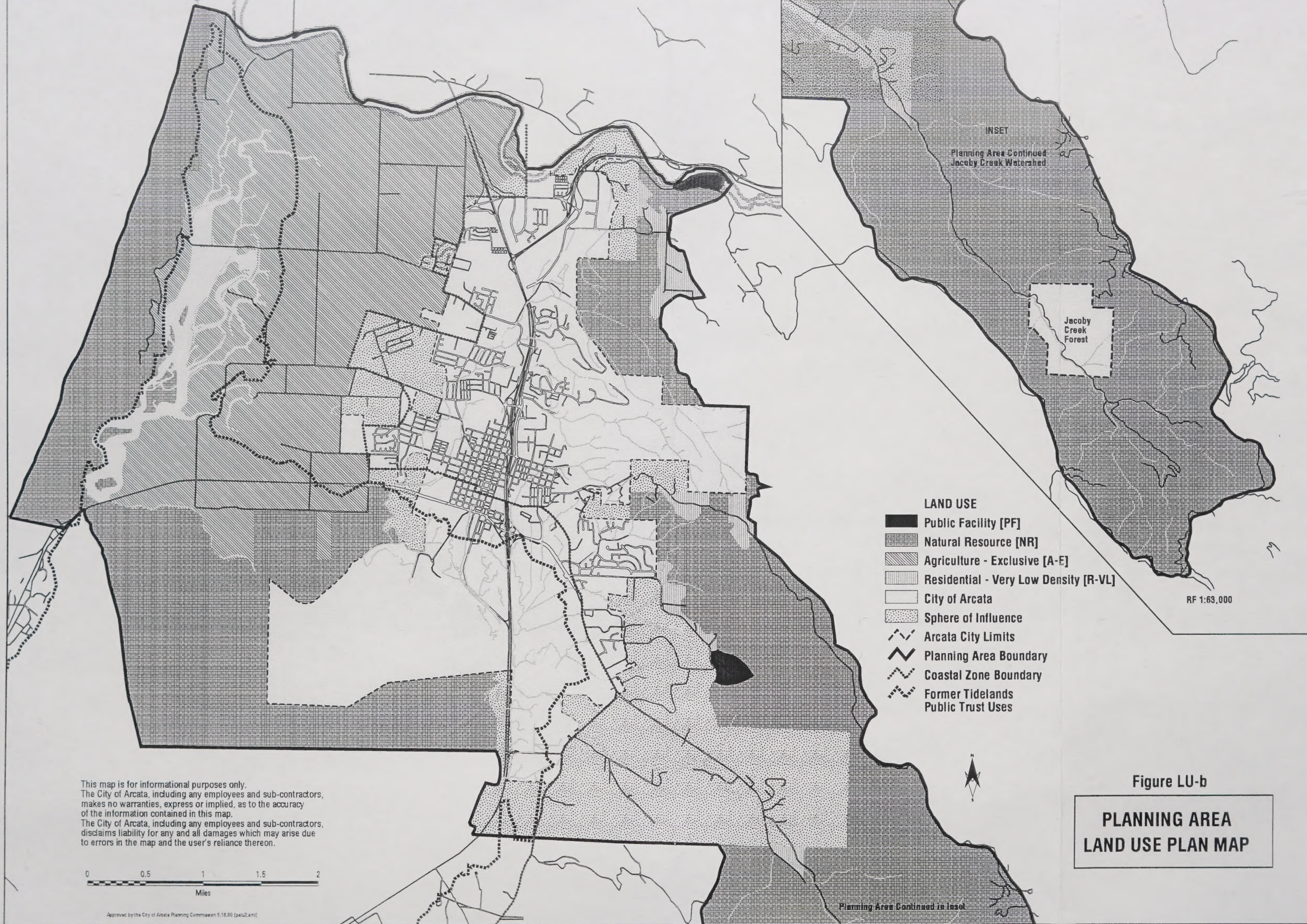
The Bayside Neighborhood Center, in the southern part of the City. It includes several commercial businesses, the Jacoby Creek School, the Bayside Post Office and Grange, and surrounding low-density residential area.

The West End Employment Center, in the northeastern part of the City. This area has a mix of general and limited industrial uses, including the Aldergrove Industrial Park.



The Samoa Boulevard Employment Center, in the southern part of the City. This area includes general and limited industrial, general commercial businesses on both sides of Samoa Boulevard, vacant land west of "K" Street, and a proposed business park site south of Samoa Boulevard.

The planned distribution of land uses throughout the City and Sphere of Influence are shown on the land use diagram, which is included as Figure LU-a in the map pocket at the end of the element. In addition, the Land Use Element addresses the City's Planning Area. The Planning Area extends north to the Mad River, west to the Pacific Ocean, south into Arcata Bay, and east to include the upper watersheds of Arcata's creeks, as shown on Figure LU-b and described in the Growth Management Element.



This map is for informational purposes only. The City of Arcata, including any employees and sub-contractors, makes no warranties, express or implied, as to the accuracy of the information contained in this map. The City of Arcata, including any employees and sub-contractors, disclaims liability for any and all damages which may arise due to errors in the map and the user's reliance thereon.

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Approved by the City of Arcata Planning Commission 5.16.00 (pau2.am)

LAND USE

- Public Facility [PF]
- Natural Resource [NR]
- Agriculture - Exclusive [A-E]
- Residential - Very Low Density [R-VL]
- City of Arcata
- Sphere of Influence
- Arcata City Limits
- Planning Area Boundary
- Coastal Zone Boundary
- Former Tidelands Public Trust Uses

RF 1:63,000

Figure LU-b

**PLANNING AREA
LAND USE PLAN MAP**

Guiding Principles and Goals.

- A. Establish and maintain a greenbelt around the City that consists of agricultural, forest, and natural resource lands. Preserve, as productive natural resources areas, the open agricultural lands in the Arcata Bottom, the forests on the eastern hillsides, and aquaculture in Arcata Bay. Protect other natural resource lands along the bayfront and watercourses for their value as natural resource lands and community open space.
- B. Allow for a range of housing choices that includes affordable dwellings for community residents, accommodates families as well as individuals and groups, and varies in size and type to reflect the diverse character of the community.
- C. Encourage retail, service, and professional businesses to locate and stay in the Commercial-Central Area by increasing the amount of housing there.
- D. Promote commercial uses in the Westwood, Valley West, Sunny Brae, Bayside, and Greenview neighborhood centers to meet day-to-day retail and service needs of nearby residents.
- E. Concentrate industrial uses in existing employment centers and encourage labor intensive and technology-driven industrial and business uses in these areas rather than resource intensive uses.
- F. Maintain community facilities such as schools, community centers, parks and recreation areas, and other civic uses and ensure they are located in areas that are accessible to all segments of the community.
- G. Encourage infill development of vacant, brownfield, and underutilized land designated for development as a way of meeting housing and employment needs without major extensions of infrastructure and services.
- H. Retain agricultural and natural resource lands within the City.
- I. Promote mixed use by encouraging residential units on upper floors in commercial areas.



2.2 POLICIES

The Land Use Element contains the following policies:

- LU-1 Overall Land Use Pattern: Land Use Plan Map
- LU-2 Residential Land Use
- LU-3 Commercial Land Use
- LU-4 Industrial Land Use
- LU-5 Public Facilities
- LU-6 Agricultural and Natural Resource Lands

POLICY LU-1 OVERALL LAND USE PATTERN: LAND USE PLAN MAP

Objective. Provide an overall land use arrangement that concentrates city-wide uses and functions in the central Plaza Area, linked with a series of neighborhood centers which provide a mix of commercial services, residential uses, and community facilities.

LU-1a Land use plan diagram. The land use plan diagram (Figure LU-a) for lands within the City and Sphere of Influence and the planning area land use map (Figure LU-b) show planned land uses for the City and surrounding areas. The land use categories, and the amount of City and Sphere of Influence land allocated for each category, are included in Table LU-1.

LU-1b Coastal land-use plan. The western portion of the Arcata Bottom, lands south of 7th and 8th Streets west of State Route 101, and lands south of Bayside and Old Arcata Roads east of State Route 101 are within the Coastal Zone, created by the California Coastal Act. The land use designations within the Coastal Zone are part of the City's Local Coastal Program (LCP).

LU-1c Maintain Arcata's Plaza Area as the community's center.

The Plaza has historically been, and should continue to be, the commercial, civic, social, and cultural center of the community, and the main location for community-wide special events. The area surrounding the Plaza (Commercial-Central area) shall be planned to accommodate the greatest concentrations of retail establishments, entertainment services, restaurants, and business and professional offices within the city. High density residential use in the Commercial-Central area is encouraged. Residential units shall be included, where feasible, in all new commercial development within the Plaza Area.



TABLE LU-1 LAND-USE PLAN CATEGORIES AND ACREAGES

ARCATA GENERAL PLAN: 2020 LAND USE DESIGNATION		CITY ACRES %		SPHERE ACRES %		TOTAL ACRES %	
R-VL	Residential - Very Low Density	572	12	600	18	1172	15
R-L	Residential - Low Density	583	12	43	2	626	8
R-M	Residential - Medium Density	158	3	17	0	175	2
R-H	Residential - High Density	151	3	0	0	151	2
C-C	Commercial - Central	25	1	0	0	25	<1
C-G	Commercial - General	62	1	28	1	90	1
C-VS	Commercial - Visitor-Serving	43	1	0	0	43	1
I-L	Industrial - Limited	247	5	102	3	349	4
I-G	Industrial - General	214	5	0	0	214	3
A-E	Agricultural - Exclusive	1055	23	824	24	1879	23
A-R	Agriculture - Residential	36	1	411	12	447	5
NR	Natural Resource	1038	23	1327	38	2365	29
PF	Public Facility	451	10	70	2	521	7
TOTAL		4635	100	3422	100	8057	100

Note: The figures above do not include road rights-of-way, interchanges and the portion of Arcata Bay within the City limits, nor do they include the 565-acre Jacoby Creek Forest, a City owned non-contiguous incorporated area. These combined areas cover an additional 2,251 acres.

LU-1d Mixed-use neighborhood centers. The existing neighborhood centers of Westwood, Valley West, Sunny Brae, Uniontown, and Greenview are designated as multiple-use sites where additional retail establishments, personal and business services, and other neighborhood-oriented commercial services are encouraged to be developed. Substantial additions to these existing centers shall include residential units on upper floors where feasible or in separate buildings. Upgrading these centers shall include additional landscaping, improvement of parking lot designs, and provision of transit access, such as bus turnouts. Appropriate lands near these centers are designated for higher density residential uses in order to encourage walking and bicycling to neighborhood services.



LU-1e Protection of natural resources and agricultural lands. Agricultural [A-E] and Natural Resource [NR] designated lands make up over half of the community land base. Their productive, open space, and natural resource values are important to the community and conversion to other non-compatible uses shall be prohibited.

LU-1f Promotion of infill development. The City encourages appropriate redevelopment of certain parcels of land which are either underutilized, brownfields, or vacant but surrounded by existing urban development. These sites represent development opportunities using existing infrastructure, and shall have priority for development over vacant sites that are located outside the urban services boundary (designated in the Growth Management Element) which require investment in extension of infrastructure and services. Infill development may include new residential units on upper floors of commercial structures, development of second units on residential lots, and new or expansion of existing residential and commercial structures consistent with the provisions of the applicable land use plan designations. The Planned Development procedure shall be encouraged for coordinated development on larger infill sites.

LU-1g Coastal dependent land uses. Coastal dependent developments shall have priority over other development or uses on or near the Arcata Bay shoreline. Coastal dependent developments shall not be sited in a wetland. Where appropriate, coastal dependent developments should be accommodated within reasonable proximity to the coastal dependent uses they support.

POLICY LU-2 RESIDENTIAL LAND USE

Objective. Allow for a mix of housing types and densities to meet the physical, social, and economic needs of residents, with new and converted housing designed to be compatible with the established neighborhood character.

LU-2a Residential Land Use Classifications. The following land use designations are applicable to residential lands. Table LU-2 defines permitted uses, densities, lot sizes, and other development standards for each classification.

Residential Very Low Density [R-VL]. This designation allows the lowest density residential development in areas where physical constraints, protection of natural features, or preservation of semi-rural character are important considerations. The R-VL designation is applicable primarily for lands with steep slopes and where the open space character of Arcata's hillsides and perimeter lands are to be preserved. Individual homesites are allowed in hillside areas, as long as precautions are taken to prevent the excessive removal of



vegetation and strict grading controls are enforced to prevent erosion. Development and grading on areas characterized by slopes over 25% should be avoided. Review of development proposals in all hillside areas shall ensure that seismic and geologic hazards are avoided or mitigated. More detailed hillside development standards are included in Policy PS-3c.

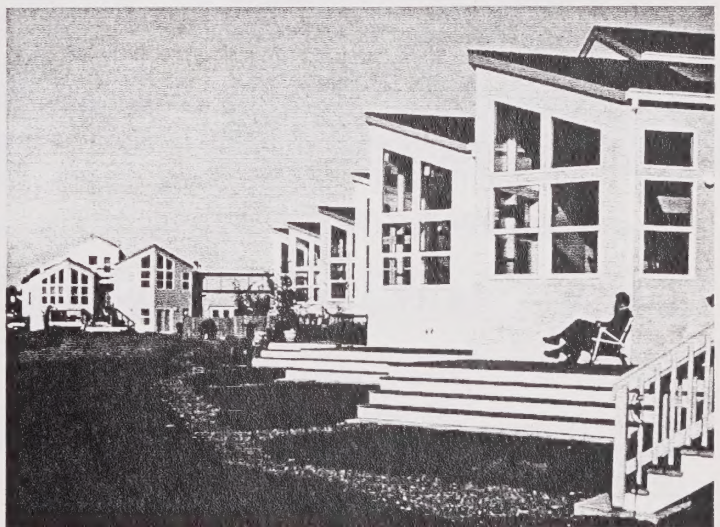
The R-VL designation allows creation of lots as small as 20,000 square feet, in the less-steep areas of Arcata's hillsides. Newly created lots in this zone must contain a buildable area of sufficient size and flatness to allow development without significant environmental damage or landform alteration. The development regulations for R-VL are intended to balance protection of the sensitive hillside environment with the need for quality housing sites. This designation is also intended to protect the existing rural environment in certain areas of Arcata and to provide a transition between urban uses and agricultural operations.

Residential – Low Density [R-L]. The low density residential designation primarily provides for single-family homes on individual lots. This designation is found throughout the community, including the older, historical neighborhoods surrounding the Plaza Area, Sunny Brae, Sunset, Preston Ridge Area, and Greenview Terrace.

Residential – Medium Density [R-M]. Medium density residential unit types typically include duplexes, townhouses, co-housing, low density apartments, and modular housing located in mobile home parks.

Residential High Density [R-H]. The Colony Inn and Humboldt Green multi-family units are representative of R-H density. R-H density residential uses are designated in central Arcata to allow increases in density above present levels.

LU-2b **Diversity and choice in residential environments.** The land use plan map shall provide sufficient quantities of land in the various residential use categories to allow for development of a variety of types of new housing units and residential environments. The purpose shall be to maintain an appropriate balance between single-family housing on individual lots and multi-unit housing types. The City shall encourage residential developments which collectively provide a variety of choices for housing consumers in terms of types of units,



location, unit sizes, costs, design, amount of privacy, and neighborhood environment. Inclusionary measures shall be provided for affordable housing. To encourage this, the City will implement inclusionary zoning and provide incentives to developers to include low and moderate income housing units in their proposals.

TABLE LU-2 RESIDENTIAL LAND USE CLASSIFICATIONS

ALLOWABLE USES	R-VL	R-L	R-M	R-H
RESIDENTIAL				
Single-family dwellings	X	X	X	
Mobile/manufactured homes	X	X	X	X
Mobile home park			X	
Duplex dwellings		X	X	X
Multi-family dwellings			X	X
Planned developments	X	X	X	X
Group residential		X	X	X
SECONDARY USES				
Small residential care facilities	X	X	X	X
Accessory (2 nd) dwelling unit	X	X	X	X
Bed and Breakfast Inns	X	X	X	
Home Occupations	X	X	X	X
DEVELOPMENT STANDARDS				
Density Range	2 or fewer primary units per acre	From 2 to a maximum of 7.25 units per acre	From 7.26 to a maximum of 15 units per acre	From 15.01 to a maximum of 32 units per acre
Maximum Floor Area Ratio*	0.20	0.50	0.50	0.60
Minimum Lot Size/Average	20,000 sq. ft.	4,000 sq. ft. with 6,000 sq. ft. average	6,000 sq. ft.	6,000 sq. ft.
Minimum Open Space	80%	50%	50 %	40%

* Floor Area Ratio (FAR) is a factor applied to the lot area to obtain the maximum permitted habitable floor area. For example, a FAR of 0.35 applied to a 10,000 square foot residential lot, would allow a maximum of 3,500 square feet of building floor area, a FAR of 0.60 would allow 6,000 square feet of floor area.

LU-2c Specific considerations for certain residential areas. Certain specific parcels have unique characteristics and/or limitations that require careful consideration when development or a change of use occurs. The considerations for the identified parcels shall be as described in Table LU-3.

TABLE LU-3 SPECIFIC CONSIDERATIONS FOR CERTAIN RESIDENTIAL AREAS

AREA	SPECIFIC CONSIDERATIONS
Plum Village	Residential development shall be limited to twelve units of which three (25%) will be affordable units and the wetlands area shall be retained. [Wedemeyer/Lewis property]
Spear Ave. & St. Louis Rd.	Residential development shall include a mix of housing types and shall be clustered to maintain creek course and riparian areas as open space. [Sorensen property]

AREA	SPECIFIC CONSIDERATIONS
Sunset at Baldwin	Residential development shall be clustered to preserve Jolly Giant Creek course and wetland areas as open space, and to reserve right-of-way for the future extension of Foster Street to Sunset Avenue. Baldwin should be extended to intersect with the extension of Foster. Access to residential development should be from Foster and Baldwin. [Franke property]
Giuntoli Lane at Hwy 299	Residential development shall be designed to attenuate noise impacts from Hwy 299. Multifamily units shall be the predominant unit type. Special consideration should be given to internal and external access. This property has a Planned Development (PD) overlay. [Peugh-King property]

LU-2d Planned residential developments. On vacant sites of one acre and larger designated for residential use, the Planned Development combining zone shall be required. The purpose shall be to: incorporate a mix of residential types, unit sizes, and styles in a coordinated manner to allow clustering of units; to provide larger, more usable areas of common open space; and to protect natural resources or site features, such as creekside riparian areas, wetlands, and significant vegetation such as trees. Where planned residential developments are adjacent to non-residential uses, appropriate visual and noise buffers shall be provided between the uses. Other provisions in the General Plan would assure affordable housing.

POLICY LU-3 COMMERCIAL LAND USE

Objective. Provide sufficient land areas and locations for a variety of retail and commercial services, to serve the consumer needs of the community and visitors.

LU-3a Commercial use classifications. The following land-use plan categories are applicable to commercial lands. Table LU-4 defines permitted uses, densities, lot sizes, and coverages for each classification.



All proposed retail uses with either: (1) a floor area greater than 30,000 square feet; or (2) physical alteration of eight or more acres; or (3) generation of 1,000 or more vehicle trips per day, shall require a use permit. The use permit review shall include, at a minimum:

- Potential impact on existing and projected traffic conditions.
- Impact on municipal utilities and services.
- Impact on the physical and ecological characteristics of the site and surrounding area.
- Impact on the community.
- Fiscal impacts of the use.

Commercial – Central [C-C]. This designation covers most of the nineteen square blocks surrounding the Plaza and includes retail, professional office, civic, hotel, theater, residential, and similar uses. The Central-Commercial Area forms the center of the City and is designed to be a high density, pedestrian-oriented activity area, with shops and services, banks, offices, restaurants, and entertainment supporting a variety of day and night activities.

TABLE LU-4 COMMERCIAL LAND USE CLASSIFICATIONS

ALLOWABLE USES	C-C	C-G	C-VS
SALES OF GOODS & SERVICES			
General retail sales and services	X	X	
Specialty retail sales and services	X	X	X
Personal service establishments	X	X	
Shopping centers	X	X	
High-impact retail commercial uses	X	X	X
Wholesale trade and warehousing		X	
Transient lodging	X	X	X
Travel trailer [RV] park			X
Animal sales and services		X	
MOTOR VEHICLE RELATED SALES & SERVICE			
Motor vehicle sales and rentals		X	X
Motor vehicles services		X	X
Gas sales		X	X
RESTAURANTS, BARS AND NIGHTCLUBS	X	X	X
COMMERCIAL RECREATION / ENTERTAINMENT			
Indoor recreation services	X	X	
Outdoor recreation uses and services		X	X
Theaters	X	X	X
BUSINESS AND PROFESSIONAL OFFICES			
Offices designed to serve customer traffic	X	X	
Offices designed to attract little customer traffic	X	X	
Health services	X	X	
EDUCATIONAL, CULTURAL & RELIGIOUS USES			
Libraries, museums, art galleries, and similar uses	X	X	
Mortuaries and funeral homes		X	
PUBLIC & SEMI-PUBLIC USES			
Government administrative offices	X	X	
Post offices	X	X	
RESIDENTIAL			
Multi-family residential	X	X	
DEVELOPMENT STANDARDS			
Maximum Structure Height	45 ft.	35 ft.	45 ft.
Minimum Lot Size	5,000 sq. ft.	5,000 sq. ft.	10,000 sq. ft.
Minimum Landscape	10%* of lot area *in-lieu credits available	10% of lot area	15% of lot area
Maximum Floor Area Ratio*	3.00	2.00	2.00

* Refer to note below Table LU-2 for explanation of Floor Area Ratio (FAR).

Commercial – General [C-G]. This designation provides the full range of retail, entertainment, and service commercial uses in Uniontown, Valley West,

Westwood/Sunset, Sunny Brae, Greenview, and Bayside neighborhood centers, and other areas, such as Northtown, Giuntoli Lane, and Samoa Boulevard. C-G development must be compatible with the surrounding residential uses and provide convenient access for patrons arriving by bicycle, public transit, motor vehicle, or on foot. A primary difference between the C-G areas and the Plaza Area is parking. Businesses in the C-G area will be expected to provide sufficient on-site parking. C-G areas are intended to have convenient access from residential areas in order to provide for day-to-day shopping and service needs.

Commercial – Visitor Serving [C-VS]. This land use designation permits hotels, motels, recreation vehicle parks, theaters, restaurants, auto sales centers, gas stations, mini-marts, and similar uses which attract or serve the needs of travelers, tourists, and local patrons.

The C-VS designation is not intended for general retail sales. C-VS uses are appropriate at highway interchanges where they are visible from the road and easily accessible by travelers and tourists. Similarly, C-VS uses are appropriate at locations near natural amenities or other attractions for visitors. The area designated for C-VS is at the State Route 101 and Giuntoli Lane interchange, west of Valley West Boulevard, and along Janes Road/Heindon Road.

LU-3b Revitalization of existing commercial areas. Reinvestment to upgrade and/or expand existing commercial centers at Sunny Brae, Westwood, Valley West, Greenview, and Uniontown shall be encouraged. Upgrades should include improvement of parking and landscaping areas; provision of facilities to accommodate bicycles, pedestrians, and transit and to reduce vehicle trips; and residential units on upper floors or in new structures.

LU-3c Northtown Commercial Area. The Northtown Commercial Area includes the area along “G” and “H” Streets from 11th Street to Sunset Avenue. If existing residential structures located along north “G” Street are converted to commercial use, some residential use should be required to be maintained on each site. Any conversions to commercial use should be required to provide on-site parking where feasible, in accordance with the parking standards of the Arcata Land Use Code. The design of parking areas shall maintain, or not detract from, the historical character of the existing structure.



LU-3d Inclusion of residential uses. Commercial developments should include residential units where feasible. Residential units should be located on upper floors or at the rear, to maintain uninterrupted commercial uses at the street level. This shall not apply to the C-VS land use category. Any residential development in new structures shall comply with the development standards of the R-M land use category.

LU-3e **Primary residential uses in Commercial – Central [C-C].** To maximize housing opportunities, residential uses are allowed as the primary use on vacant sites designated C-C, at densities consistent with the R-H designation, with a use permit.

TABLE LU-5 SPECIFIC CONSIDERATIONS FOR CERTAIN COMMERCIAL AREAS

AREA	SPECIFIC CONSIDERATION
Giuntoli Lane at State Route 101	Commercial development should include consolidated access points, parking that is screened, and setbacks from the Mad River. This property is within the urban services boundary, must be annexed, and has a Planned Development (PD) overlay [Graham Property].

POLICY LU-4 INDUSTRIAL LAND USE

Objective. Provide for uses which will retain and generate jobs, including labor-intensive manufacturing, processing, assembly, warehousing, services, and complementary non-industrial uses, in appropriate locations.

LU-4a **Industrial uses.** The following land use designations are applicable to industrial lands. Table LU-6 defines permitted uses, densities, lot sizes, and coverages for each classification.



Industrial – Limited [I-L]. This land use designation is intended to provide attractive industrial areas suitable for light manufacturing and limited commercial uses. High impact industrial uses more prone to produce noise, odors, heavy truck



traffic, or dust are not permitted in limited industrial areas. The I-L land use designation includes auto sales; service and repairs; sales of mobile homes, trucks and tractors; warehousing and wholesaling establishments; outdoor sales and storage lots; light industrial activities (when conducted within a building); and similar uses. Some retail sales uses and services, particularly those involving sales of products made on the premises, will be allowed as an accessory use. Residential uses may also be permitted where they are compatible with the nature of the production process, or the related sales of products made on the premises (such as artists' live/work space). The major I-L areas are the West Samoa Boulevard Employment Center, a portion of the West End Employment Center (near the State Route 299/Giuntoli Lane interchange and the Aldergrove Industrial Park), the area west of "K" Street, South "G" Street, and South "I" Street.

Industrial – General [I-G]. This land use designation indicates areas which are appropriate for manufacturing; large-scale wood processing and storage; auto wrecking and storage yards, and all other general industrial operations. Some industrial operations generate noise, odors, or traffic which make them incompatible neighbors with residential or most commercial uses.

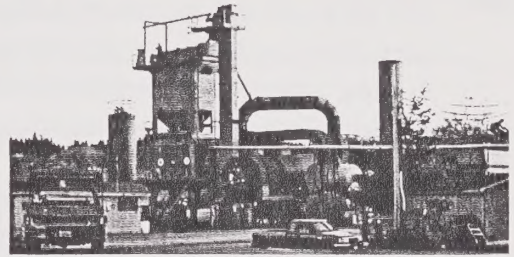


TABLE LU-6 INDUSTRIAL / PUBLIC FACILITY LAND USE CLASSIFICATIONS

ALLOWABLE USES	I-L	I-G	PF
SALES OF GOODS AND SERVICES			
Personal services establishments	X		
High impact commercial uses	X		
Outdoor sales and storage of merchandise	X		
Wholesale trade and warehousing	X	X	
Animal sales and services	X	X	
MOTOR VEHICLE-RELATED SALES AND SERVICES			
Motor vehicle sales and rentals	X		
Motor vehicle services	X		
Gas stations	X		
RESTAURANTS AND NIGHTCLUBS	X		
COMMERCIAL RECREATION / ENTERTAINMENT			
Indoor recreation services	X		
BUSINESS AND PROFESSIONAL OFFICES			
Offices designed to serve customer traffic	X		
Offices designed to attract little customer traffic	X		
EDUCATIONAL, CULTURAL & RELIGIOUS USES			X
RESIDENTIAL	X		
PUBLIC & SEMI-PUBLIC USES			X
HIGH IMPACT MANUFACTURING & PROCESSING		X	
MODERATE IMPACT MANUFACTURING & PROCESSING	X	X	
DEVELOPMENT STANDARDS			
Maximum Structure Height	45 ft.	50 ft.	50 ft.
Minimum Lot Size	6,000 sq. ft.	1 acre	None
Minimum Landscape	10% of lot area	10% of lot area	10% of lot area
Maximum Floor Area Ratio*	1.50	1.50	1.50

* Refer to note below Table LU-2 for explanation of Floor Area Ratio (FAR).

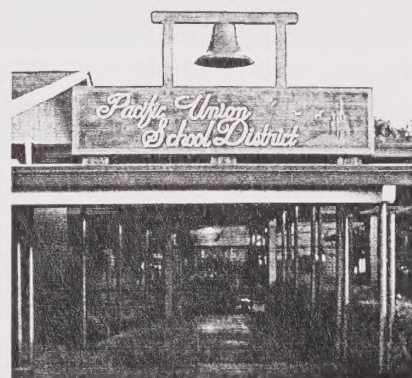
- LU-4b **Conversion and reuse of old industrial sites.** The City shall encourage the conversion and reuse of abandoned or inactive industrial sites such as closed lumber mill sites. An environmental site assessment will be required for sites where prior uses may have caused soil contamination. Manufacturing uses may be allowed on older I-G sites, where activities are conducted in enclosed spaces and noise, light, air quality, or traffic impacts do not significantly impact adjacent uses.
- LU-4c **Incubator industrial sites.** Encourage small business incubator sites and cottage industries as part of the City's mix of industrial uses.
- LU-4d **Industrial performance standards.** The City shall develop and adopt performance standards ensuring that new and upgraded industrial uses are attractively designed, keep noisy uses in enclosed spaces, do not emit light or glare off site, and contain other features that make them compatible with adjacent uses.
- LU-4e **Specific areas and parcels.** Certain land areas and parcels have unique characteristics, limitations, and/or opportunities that require careful consideration when development or a change of use occurs. The considerations described below shall be made for the identified parcels.
- LU-4f **South "I" Street.** Development of a new "business park" at the site of the former Little Lake Industries lumber mill on South "I" Street shall be a priority of the City. The site shall be planned as a mixed-use development. A master plan shall be prepared for the site which includes the specific considerations found in Table LU-7.
- LU-4g **Coastal related resource extraction and processing.** The City of Arcata recognizes the national need for the responsible exploration, recovery, and processing of the country's energy resources. However, the City also recognizes the potential adverse impacts such activities can have on sensitive land and marine resources and on the scenic quality of coastal resources. Therefore, the City finds that, in order to minimize adverse impacts to such resources, on- and off-shore petroleum product exploration, recovery, and processing should be confined to those geographic areas which now accommodate these uses and activities. Consistent with this policy, the City shall prohibit on-shore petroleum exploration, production, and processing within its boundaries, and shall oppose the use of off-shore areas south and west of Arcata and in Humboldt County in general for such uses.

TABLE LU-7 SPECIFIC CONSIDERATIONS FOR CERTAIN INDUSTRIAL AREAS

AREA	EXISTING USE	CONSIDERATION
"K" Street Industrial Area	I-L	Provide live-work spaces; revitalize older industrial uses.
West End Road Corridor	I-L and I-G	Promote more intensive industrial uses.
Aldergrove Industrial Park	I-L	Coordinated light industrial development, with increased landscaping.
Giuntoli Lane/ Valley East area (Zanzi)	I-L and I-G	Planned Development for entire property to minimize access points on Giuntoli, and coordinate land uses, interior circulation, shared parking, and overall building layout. Constraints include setback area along Mad River.
Northcoast Hardwoods site (Samoa Blvd.)	I-G	Planned Development for entire property to minimize access points on Samoa, and coordinate land uses, interior circulation, shared parking, and overall building layout.
Winkel Property - Little Lake Industries (South I Street)	I-L	Planned development for entire site to encourage: 1. An area not less than 25-feet wide adjacent and parallel to "I" Street shall be a landscape buffer between heavy manufacturing uses to the west and internal development on the site. Landscaping within the buffer strip shall include a dense planting of trees of species appropriate to the coastal environment. 2. A multi-use coastal access pathway shall be included along the entire landscape buffer to connect the Samoa Boulevard area to the Arcata Marsh and bay shoreline. 3. The former marsh areas at the southern portion of the property (south of the railroad tracks) shall be restored or recreated. 4. A small portion of the site adjacent to the Marsh Commons area, or along Butcher Slough, may be suitable for limited residential development. 5. A small portion of the site adjacent to the restored marsh area may be suitable as a site for an "eco-lodge" or other eco-tourism uses focused on coastal recreation. 6. The northern portion of the site east of the landscape buffer may be developed as a "business park" with light industrial and business-service uses. Comprehensive development standards for the business park area, including sidewalks, landscaping, and building design, shall be included in the master plan for the site. 7. A creekside conservation area shall also be required parallel to the top of the bank of Butcher Slough.

POLICY LU-5 PUBLIC FACILITIES

Objective. Provide appropriate locations and sites for water storage and delivery; wastewater collection and treatment; drainage; solid waste management; fire protection; parks and recreation; civic and institutional uses; and education (public and private) facilities.



- LU-5a Public Facility [PF] uses.** Public Facility land use category is applicable to those lands which are to be used for the various types of public facilities, except that some public facility uses are also allowed in other land-use categories. Public facility uses include certain uses which may be owned by private individuals, private organizations, or private institutions, as well as by government entities. Uses include schools, public services and administrative offices, wastewater and solid waste management facilities, public parking lots, parks and non-commercial recreation uses, golf courses, auditoriums, and other public assembly spaces, hospitals, cultural facilities, community gardens, communication (including telecommunications) and transportation facilities, and utilities. The types of uses allowable within this category shall be specified in Table LU-6.



- LU-5b Development standards for public facilities.** Standards applicable to development of public facility uses shall be as specified in Table LU-6.

- LU-5c Limitation of corporation yard expansion.** Development of the City corporation yard facilities shall be restricted to its existing boundaries. A landscape screen shall be maintained along with northern and eastern perimeter of the oxidation pond.

TABLE LU-8 SPECIFIC CONSIDERATIONS FOR CERTAIN PUBLIC FACILITY AREAS

AREA	SPECIFIC CONSIDERATION
Mad River Hospital	Hospital development should retain 50% contiguous open space, have adequate provisions for on site retention of stormwater, be compatible in scale with surrounding uses, provide open space easements to city or land trust, and limit extent of impervious surfaces (e.g. parking lots) as much as possible through a Planned Development.

POLICY LU-6 AGRICULTURAL AND NATURAL RESOURCE LANDS

Objectives. Preserve and promote the sustained production of natural resources; preserve and promote the agricultural, forest, and aquaculture lands; and protect public natural resource/open space lands, including stream courses, wetlands, tidelands, and open space areas. Provide for complementary uses including farm housing, processing of agricultural and aquaculture products, and access for timber harvesting, in designated areas.

- LU-6a Agricultural and Natural Resource classifications.** The following land use categories are applicable to agricultural and natural resource lands. Table LU-9 defines permitted uses, densities, lot sizes, and coverages for each category.

Natural Resource [NR]. This designation is applied to public or private lands where protection of unique and/or sensitive natural resources, or managed production of resources, are the primary objectives. The resources element describes three subdistrict zones within the NR district which are designated: Wetland Stream Protection Zone (NR-WSPZ), Timber



Production Zone (NR-TPZ), and Public Trust Zone (NR-PTZ). Examples of lands designated NR include the Community Forest (NR-TPZ), Janes Creek /McDaniel Slough Linear Park (NR-WSPZ), and the Arcata Marsh and Wildlife Sanctuary (NR-PTZ). Recreation may be considered as a secondary use when there are no adverse impacts to the protected resources. This designation is also applicable to productive resource lands, such as timber-producing forested areas (NR-TPZ) and aquaculture in Arcata Bay (NR-PTZ). The land between Humboldt State University and the Community Forest is an example of productive forest lands designated (NR-TPZ).

The NR designation is not applied to small or "pocket" wetlands, that exist on parcels large enough to accommodate development without adversely impacting the wetlands. The designation is also not applied to wetlands used as grazed agricultural lands, or riparian areas in other zones. These resource areas are protected by applicable stream and wetlands standards.

Agriculture Exclusive [A-E].

This designation is intended to preserve land for agricultural production. The A-E designation is appropriate for lands with prime agricultural soils and wetlands that could be used as grazed agricultural lands. Structures associated with agricultural production, such as barns and farmhouses, are appropriate uses in A-E areas.



Structures associated with agricultural production, such as barns and farmhouses, are appropriate uses in A-E areas.

Agriculture Residential [A-R]. This designation allows very low density residential development on agricultural lands. Structures associated with agricultural production, such as barns and farmhouses, would be appropriate uses in these agricultural areas.

TABLE LU-9 AGRICULTURAL AND NATURAL RESOURCE LAND USE CLASSIFICATIONS

ALLOWABLE USES	A-E	A-R	NR
RESIDENTIAL			
Single-family dwellings	X	X	
Mobile / manufactured homes	X	X	
Secondary residential uses	X	X	
Bed & Breakfast (as secondary use with use permit)	X	X	
COMMERCIAL RECREATION & ENTERTAINMENT			
Coastal-dependent recreation	X		X
AGRICULTURE, MINING, SILVICULTURE & AQUACULTURE			
General agriculture, except keeping confined animals	X	X	
Agriculture, including keeping of confined animals	X		
Agriculture-related processing facilities	X		
Commercial greenhouse operations	X	X	
Aggregate and other mining			X
Silvicultural operations			X
Aquacultural operations			X
NATURAL RESOURCE CONSERVATION USES	X	X	X
DEVELOPMENT STANDARDS			
Density Range	1 primary residential unit per parcel (and a secondary unit)	1 primary residential unit per parcel (and a secondary unit)	1 unit per existing parcel
Maximum Structure Height	35 ft.	35 ft.	35 ft.
Minimum Lot Size	20 acres (60 ac. in coastal zone)	2.5 acres	20 acres
Maximum Floor Area Ratio*	.10 / Higher with Conditional Use Permit	.10	NA

* Refer to note below Table LU-2 for explanation of Floor Area Ratio (FAR).

LU-6b Compatibility between agricultural and adjacent non-agricultural uses.

Agricultural practices can include spraying of herbicides, application of fertilizer, operation of farm equipment, and use of local roads by slow moving and large vehicles. These practices can cause noise, health, light, odor, and travel impacts for residents in adjacent non-agricultural areas. To minimize these impacts, development of new non-agricultural uses that locate adjacent to existing agricultural uses shall maintain setbacks and establish buffers. The potential impacts of adjacent agricultural practices shall be required to be disclosed to future residents. Where new or expanding agricultural uses locate adjacent to existing non-agricultural areas, the agricultural user shall be responsible for maintaining setbacks and establishing buffers.

LU-6c Protection of agricultural lands and uses within the City.



represent an important natural resource within the City. The protection of agricultural lands shall include the following:

1. Lands designated Agricultural Exclusive [A-E] with Grade* 1 and 2 soils are the City's prime agricultural resource; lands designated [A-E] with Grade* 3 and 4

soils support less intensive uses than lands with higher grade soils, but are still viable for resource production. A-E lands shall not be developed, except for agricultural-related uses.

2. Agricultural uses on lands designated other than A-E shall be allowed and encouraged, consistent with other General Plan policies.
3. Existing agricultural practices on seasonal wetlands shall be allowed to continue, consistent with other General Plan policies.
4. The minimum lot size for lands designated A-E shall be twenty acres, except in the coastal zone where the minimum lot size shall be sixty acres. Designated uses for agricultural lands within the coastal zone shall include the following:
 - The "Permitted Uses" section shall include: "Agricultural Structures, including greenhouses or other nursery structures erected over exposed soil."
 - The "Conditionally Permitted Uses" section shall include: Greenhouses or other nursery structures erected on concrete perimeter foundations may be permitted if no less environmentally damaging alternate is available."
 - Greenhouses on slab foundations are prohibited.

Private and public non-vehicular recreational activities such as hiking, riding, fishing, hunting, and other recreational activities which do not require permanent structures, facilities, or foundations may be permitted in areas designated A-E if they do not interfere with adjacent agricultural uses, or limit potential of the site to return to agricultural use, or displace the wildlife utilizing the area, especially in seasonal wetlands. This shall be implemented in the City's land use code.

LU-6d Uses allowed in diked/reclaimed former tidelands. Allowable uses and development in grazed or farmed wetlands are limited to uses compatible with the Public Trust. These uses are summarized below:

1. Agricultural operations limited to accessory structures, apiaries, field and truck crops, livestock raising, greenhouses (provided they are not located on slab foundations and crops are grown in the existing soil on site), and orchards.
2. Farm-related structures, including barns, sheds, and farmer-occupied housing, necessary for the performance of agricultural operations. Such structures may be located on an existing grazed or farmed wetland parcel only if no alternative upland location is available for such purpose and the structures are sited and designed to minimize adverse environmental effects on Public Trust resources and uses. No more than one primary and one secondary residential unit shall be allowed per parcel.
3. Restoration projects.
4. Nature study, aquaculture, and similar resource-dependent activities compatible with the Public Trust resources and uses.
5. Incidental public service purposes which may temporarily impact the resources of the area (such as burying cables or pipes).

LU-6e Relationship with the Open Space and Resource Conservation and Management Elements. The Open Space and Resource Conservation and Management Elements (General Plan Chapter 4) address the natural resource values of agricultural and natural resource lands. Lands designated Agriculture Exclusive [A-E] and Natural Resource [NR] are important components of City's open space, as defined in the Open Space Element. The conservation and management of these lands for their natural resource values, as well as their biological, hydrological and soil resources, are specifically addressed in the Resource Conservation and Management Element. The policies of both these elements shall apply to future agricultural and natural resource land use decisions.

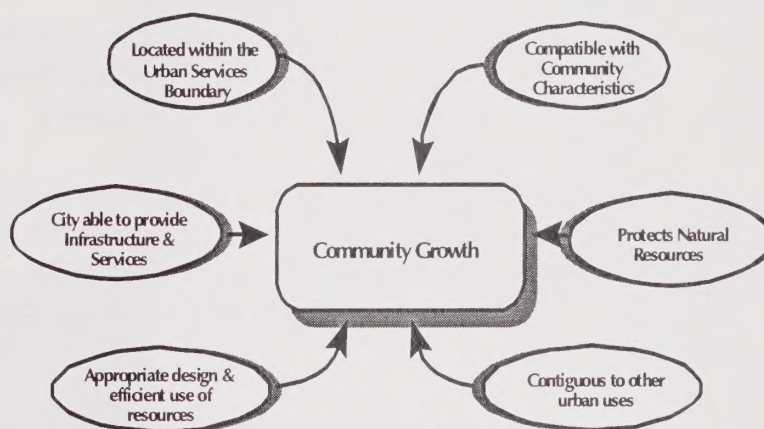
2.3 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
LU -1	Land Use Code Amendments Revise the City Land Use Code (formerly the Land Use and Development Guide, or LUDG) zoning districts and land use regulations to be consistent with the General Plan land use designations, densities, primary and secondary uses, building intensity, lot sizes, and coverages. Add inclusionary zoning provisions for affordable housing.	Community Development Department/ Planning Commission	Year 1
LU -2	Conversion and Reuse of Inactive Mill and other Industrial Sites Solicit property owner cooperation and pursue funding for environmental site assessments and clean-up of abandoned or inactive mill sites. Encourage conversion of these sites when proposed reuse is consistent with General Plan goals and policies.	Community Development Department/ Property Owners	Ongoing beginning in Year 1
LU -3	Maintain Economic Strategies Plan The Economic Strategy Report is intended to be a guide for City actions pertaining to economic improvement. The report should be updated periodically for compliance with General Plan policies.	City Manager's Office	Every five years beginning in Year 3
LU -4	New Business Park Master Plan Seek funding for and prepare a business park master plan for the reuse of the South "I" Street property for mixed-use development.	Community Development Department	Year 2
LU -5	Neighborhood Centers City staff will communicate City policy regarding mixed use to neighborhood center owners and managers, and work proactively with them to maximize use of the centers.	Community Development Department	Year 1
LU -6	Industrial Performance Standards City staff will communicate City policy regarding performance standards to industrial area owners and managers and work proactively with them to improve appearances, and reduce noise, light, and glare from operations.	Community Development Department	Year 1
LU -7	Affordable Housing Include inclusionary zoning measures and/or incentives in the next update of the Housing Element.	Community Development Department	2002

GROWTH MANAGEMENT ELEMENT

2.4 INTRODUCTION

Growth Management Overview. Since it was originally incorporated in the late 1850s, Arcata has grown to an estimated 1998 population of about 16,500 persons. The General Plan includes an assumption of low population growth, to about 20,000 persons, by the year 2020. The majority of the City's growth has been, and is planned to be, located within the present City boundary, and concentrated around the downtown area, existing neighborhood commercial centers (see Land Use Element), and Humboldt State University. Growth is directed to these areas because they have existing urban services and infrastructure. There are currently about 7,500 students enrolled at Humboldt State University, with maximum enrollment limited to 8,500 (full time equivalent) students. This potential enrollment increase will also impact the size and characteristics of the City.



Growth Management Considerations

The City of Arcata has an incorporated area defined by its City limits; an Urban Services Boundary that defines the limits for extending City services and infrastructure so as to accommodate new development anticipated within the time frame of this General Plan; a Sphere of Influence boundary that indicates unincorporated lands which ultimately may be developed and annexed to the City; and a Planning Area which includes nearby unincorporated lands. Collectively, these planning features and the policies that guide related development activities, such as annexation, constitute the City's growth management program. The City's Sphere of Influence is shown on Figure LU-a, the Planning Area on Figure LU-b, and the Urban Services Boundary on Figure GM-a. Each of these features is described in more detail below.

Annexations/ Expansion of City Boundaries.

The Cortese/Knox Local Government Reorganization Act of 1985 sets forth the rules and regulations under which Arcata may expand its adopted City limits. The legislative intention of this law is to encourage orderly growth and development, which is considered essential to the social, fiscal, and economic well-being of the state. It recognizes that the

formation of local agency boundaries is an important factor in assuring that development is orderly. Within the legislation, the Local Agency Formation Commission (LAFCo) is given the sole and exclusive authority for the annexation of additional territory to a city. The Coastal Land Use Plan applies only to the land areas which are within the city boundary.



Sphere of Influence.

Before LAFCo may approve territorial annexation, it must define and adopt a Sphere of Influence for the City. A Sphere of Influence is described as a plan for the probable ultimate physical boundaries and service area of a local agency.

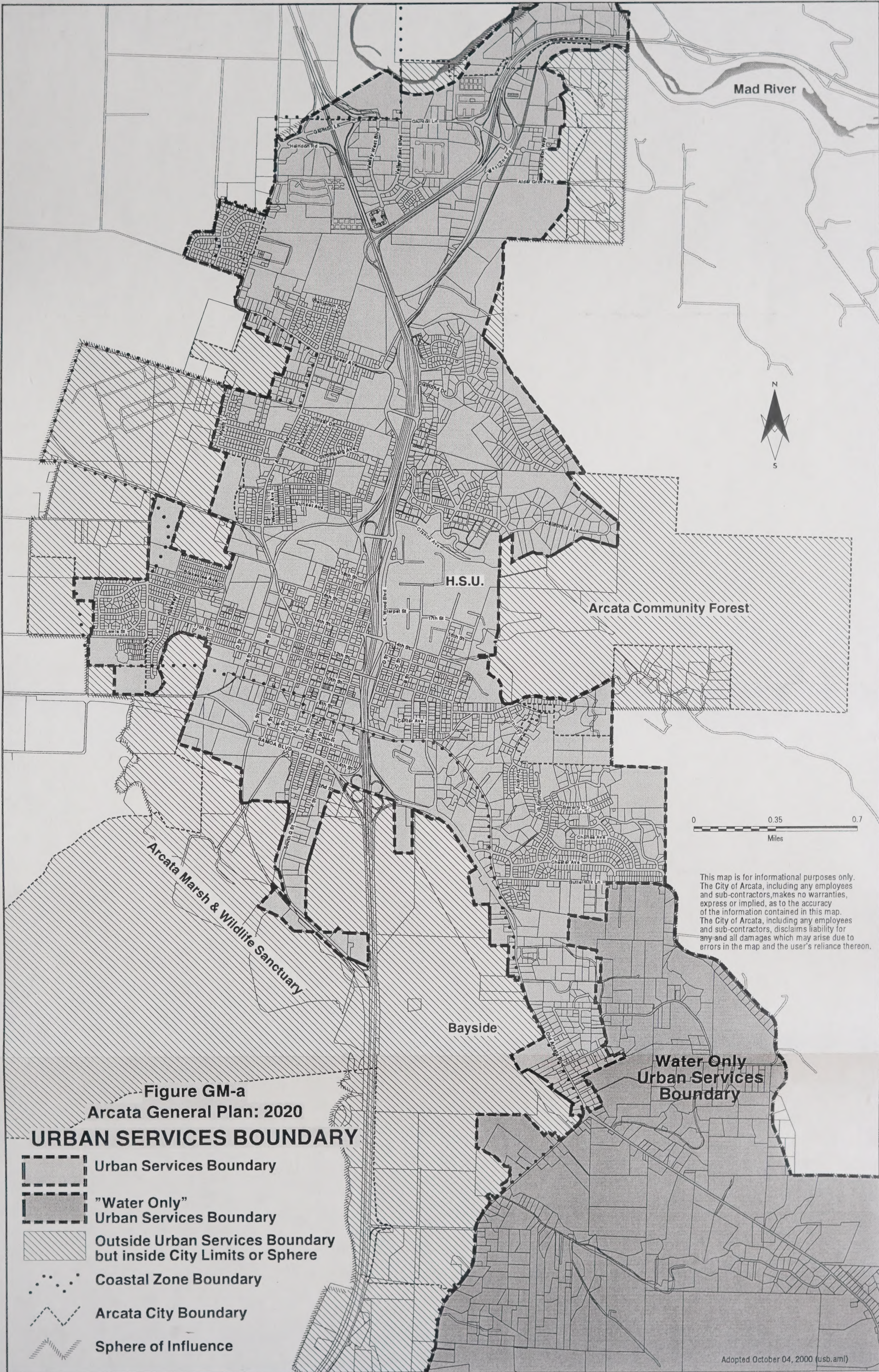
The Sphere of Influence boundary includes all City lands and unincorporated lands that may be annexed as part of the ultimate development of the City. This ultimate development extends beyond the twenty-year time frame of the General Plan. Designating unincorporated (under the jurisdiction of the County) lands within the Sphere of Influence is done for two reasons:

1. It allows the City to plan for the eventual annexation and extension of services as part of community growth.
2. It designates uses for those lands that are compatible with adjacent City lands. The City's Sphere of Influence is adopted, as required by state law, by the Humboldt County LAFCo, a county-wide agency.

Arcata Planning Area.

California planning law requires the City to adopt a general plan for lands within its limits and also for any land outside its boundaries which bears relation to its planning. Defining a Planning Area is a means by which the City can communicate its concerns for the future of surrounding lands under the jurisdiction of the County or neighboring cities. The Planning Area may extend beyond the City's Sphere of Influence.

The Planning Area includes the City, the Sphere of Influence and surrounding county lands that are intended to remain unincorporated, where uses and activities impact the City. The Planning Area boundary is determined by geographic features, such as the Pacific Dunes, Pacific Ocean, Mad River, Fickle Hill ridgeline, and hydrological features such as the watersheds of Arcata's creeks. Other considerations for determining the Planning Area include preserving viewsheds and maintaining a greenbelt around the City.



Mad River



H.S.U.

Arcata Community Forest

0 0.35 0.7
Miles

This map is for informational purposes only. The City of Arcata, including any employees and sub-contractors, makes no warranties, express or implied, as to the accuracy of the information contained in this map. The City of Arcata, including any employees and sub-contractors, disclaims liability for any and all damages which may arise due to errors in the map and the user's reliance thereon.

Arcata Marsh & Wildlife Sanctuary

Bayside

Water Only
Urban Services
Boundary

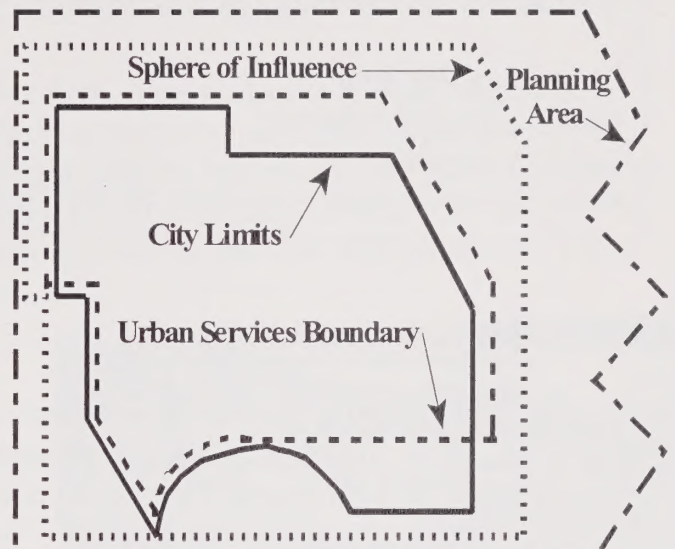
Figure GM-a
Arcata General Plan: 2020

URBAN SERVICES BOUNDARY

- Urban Services Boundary
- "Water Only" Urban Services Boundary
- Outside Urban Services Boundary but inside City Limits or Sphere
- Coastal Zone Boundary
- Arcata City Boundary
- Sphere of Influence

The Urban Services Boundary.

The Urban Services Boundary is a mapped limit line surrounding the City's developed and developing areas. It can also include areas of the Sphere of Influence where urban development is planned. Inside the City limits, the boundary excludes areas inappropriate for urban development, such as agricultural lands and the community forest. Where it extends beyond the City limits, it does not extend outside the City's Sphere of Influence. The boundary is determined by the City's interest in extending services and infrastructure (water, wastewater collection, police services, etc.) to urban uses. The City provides certain areas, such as Jacoby Creek, with "water only" services. The Urban Services Boundary encompasses the area wherein urban development may occur during the General Plan's twenty-year time frame.



Illustrative of City Limit, Urban Services Boundary, Sphere of Influence and Planning Area Boundary

Guiding Principles and Goals.

- A. Lands in the Sphere of Influence should remain undeveloped until they are annexed to the City.
- B. Preserve the rural character and promote resource protection in the Planning Area.
- C. Maintain an Urban Services Boundary that serves only the existing urban area, and areas appropriate for development by the year 2020.
- D. Locate new urban development in areas contiguous to existing urban uses.
- E. Protect flood-prone, steeply sloped, streamside buffer areas and productive natural resource, agricultural, and forest lands from urban development.
- F. Incorporate greenbelts, designated natural areas, and other open space into the planning area and Sphere of Influence in order to maintain an identity separate from surrounding communities.
- G. Manage the timing and amount of growth in accordance with the ability to maintain acceptable levels of service and quality of life for existing and new residents.

2.5 POLICIES

The Growth Management Element contains the following policies:

- GM-1 Planning Area
- GM-2 Sphere of Influence
- GM-3 Annexation
- GM-4 Urban Services and Urban Services Boundary

POLICY GM-1 PLANNING AREA

Objective. Advocate appropriate uses and management for Planning Area lands outside the City boundary, including Arcata's creek watersheds and coastal areas, in recognition that they will affect the future form of the Arcata community.

GM-1a Planning Area. The Planning Area shall include all lands within the boundary shown on Figure LU-a. The Planning Area includes lands where any future changes or management practices are likely to have an impact on the City of Arcata. The City shall request that all land use applications received by the County, or resource management plans received by other agencies, be referred to the City. The City shall review and comment on these applications and plans. The City shall also advocate that the County implement policies and that property owners manage for the conservation of these unincorporated lands. This policy applies to lands within the Planning Area but outside the Sphere of Influence.

GM-1b Referrals by Humboldt County. The City shall review all development and infrastructure proposals affecting the Planning Area and communicate the City's position on these matters to the applicable decision-making body. Humboldt County shall be requested to refer all planning studies and applications for development in the Planning Area to the Arcata Community Development Department, for review and comment, prior to taking action.



GM-1c Land-use designations within the Planning Area. The City shall request that the County of Humboldt retain rural and agricultural designations on lands located within the Planning Area. The City shall request that the County adopt consistent land use designations for lands within the planning area but outside the Sphere of Influence, as shown on Figure LU-b.

GM-1d **Greenbelt.** The rural and agricultural lands within the Planning Area are designated by the City as open space or greenbelt. The intent is that such lands shall not be developed with urban densities or uses and that land uses shall be limited to agricultural production and natural resources conservation.

GM-1e **Resource Protection in the Planning Area.** Proposals which could affect the Planning Area's resources, including those resources addressed in the Resources Conservation and Management Element, shall be reviewed by the City. City review shall address the proposal's compatibility with applicable General Plan policy. The City shall communicate the intent of this policy to agencies with jurisdiction within the Planning Area (for example, the California Department of Forestry and Fire Protection for timber management, and the Humboldt Bay Harbor, Recreation and Conservation District for Humboldt Bay tidelands management) together with the policies in the Resource Conservation and Management Element.



POLICY GM-2 SPHERE OF INFLUENCE

Objective. Designate an appropriate amount of urban reserve and open space land in the Sphere of Influence to provide for the ultimate development of the City.

GM-2a **Sphere of Influence.** The proposed Sphere of Influence boundary, which must be adopted by LAFCo for the City of Arcata, is shown on Figure GM-a. The boundary defines land parcels that are eligible for annexation to the City in the future. The City shall maintain an adequate amount of land in the Sphere of Influence to accommodate future growth, consistent with the goals and policies of this plan, as well as to protect open space and productive resource uses. Annexation of property may not proceed unless or until such lands are within the Sphere of Influence boundary.

GM-2b **Changes to the Sphere of Influence boundary.** The City shall comprehensively evaluate the Sphere of Influence boundary at least every five years, but more frequently if appropriate. Any boundary amendments shall be considered by the Planning Commission and recommended to the City Council, prior to any action by LAFCo. Any City decision to change the boundary shall be based on the following:

1. The resulting area has an adequate supply of land to accommodate projected housing needs allocated by the Humboldt County Council of Government.

2. Any owner of property located adjacent the Sphere of Influence boundary may request that the City add his or her lands to the Sphere of Influence.
3. Any such proposal shall also identify the requested land use designations and any other necessary or appropriate amendments to the various elements of the General Plan.
4. In considering such requests, and at each periodic comprehensive evaluation, the City Council, upon recommendation of the Planning Commission, shall determine whether it would serve the public interest to designate additional lands for which to provide municipal services and developed with urban uses.
5. An amendment to the Sphere of Influence to include additional lands shall be subject to environmental review pursuant to CEQA.
6. A proposal to amend the Sphere of Influence may be considered concurrently with an annexation request.
7. Any adjustment to the sphere boundary incorporates adequate provisions for open space.

GM-2c Areas in Sphere of Influence intended only for partial services. Some areas are included in the Sphere of Influence only for the purpose of receiving City water service, such as the Jacoby Creek residential area. Such areas are not to be considered for annexation during the 20-year time frame of this Plan.



GM-2d City land-use designations. The City's land use designations for parcels located within the Sphere of Influence are shown in Figure LU-a. These designations have legal force and effect only upon annexation of particular land areas to the City.

GM-2e Prezoning of parcels within the Sphere of Influence. Lands in the Sphere of Influence shall not be prezoned until the City considers particular annexation requests. Such prezoning shall be consistent with the City land-use designations for the Sphere area, or a General Plan Amendment would be required. The purpose shall be to provide maximum latitude to the City to determine the appropriate timing of expansion of the City boundaries, extension of services, and urban development.

GM-2f County Land-use and Zoning designations in Sphere of Influence. The City shall request that Humboldt County adopt agricultural, natural resource, or other rural land use designations, within the Sphere of Influence, as a holding zone to prevent premature development prior to annexation to the City. This shall not apply to

areas which are already fully developed such as Pacific Manor. The County's land-use designations are legally binding until annexation to the City is completed.

- GM-2g **Resource lands in the Sphere of Influence.** The City shall periodically review the SOI boundary, especially to the west, to determine whether resource lands are being adequately protected.

POLICY GM-3 ANNEXATIONS

Objective. Provide for logical annexations of unincorporated areas, within the City's Sphere of Influence and/or Planning Area, when the existing or proposed development is consistent with community character and City services can be adequately provided.

- GM-3a **City annexation procedure.** The City prefers to consider annexation requests prior to LAFCo consideration. If area property owner(s) or residents request that the City initiate an annexation request to LAFCo, the following procedures shall apply:

1. Initiation:
 - a. If lands are inhabited, a petition must be signed by no less than fifty percent of the resident voters, or at least twenty-five percent of owners of property located within the annexation area;
 - b. If lands are uninhabited but consist of more than one parcel and owner, a petition must be signed by a majority of owners representing more than fifty percent of the annexation area;
 - c. If a single parcel, a petition must be submitted by owner(s).
2. The Planning Commission shall review and make a recommendation on the requested annexation to City Council.
3. Final Action shall be taken by Council regarding Resolution of Intention for annexation.
4. Following City Council approval of annexation request, including any accompanying General Plan amendment, pre-zoning ordinance and/or environmental document, the City shall transmit the annexation request to LAFCo for its consideration and decision.

- GM-3b **Required materials for consideration of annexations of non-urbanized land areas.** The following shall apply to annexation requests where the land proposed to be added to the City is not developed with urban land uses prior to annexation:

1. The City, or experts under contract to the City, shall prepare a detailed annexation study addressing items "a" through "f" listed below.
 - a. A comprehensive and detailed analysis of the fiscal impacts of the annexation, addressing the full range of revenues and expenditures. One-

- time capital costs of facilities, as well as recurring operating costs and revenues, shall be evaluated;
- b. A study and/or proposal for tax-sharing agreements with other taxing entities, such as the County;
 - c. An accompanying General Plan Amendment, if requested or appropriate;
 - d. A proposed preliminary development plan, including phasing if appropriate;
 - e. An assessment of the City's capacity to provide facilities and services, including: wastewater collection and treatment; stormwater management; water supply and distribution; streets and circulation; fire protection; police services; parks; and others as appropriate;
 - f. A rezoning ordinance. The costs of preparing the annexation study, including City administrative costs, shall be borne by the property owner(s) requesting the City to consider the annexation.
2. An environmental document pursuant to CEQA.
 3. A Planned Development or Specific Plan may be required for any land area greater than five acres.

GM-3c Criteria for annexation of undeveloped land areas. All undeveloped lands proposed for annexation shall be added to the City only if the following criteria are met. The proposed annexation area shall:



1. Be within Urban Services Boundary and adjacent to existing urban development.
2. Not exceed the City's capacity to provide services and infrastructure to accommodate proposed development.
3. Have annexation timed so that availability of services and infrastructure is concurrent with need.
4. Have a positive or neutral fiscal impact, or other overriding public benefits;
5. Be in compliance with General Plan policies.
6. Not include prime agriculture land (Storie Index 60 or higher) other than with designation and prezone as Agriculture–Exclusive [A-E].

GM-3d Criteria for annexation of areas with existing urban development. All lands with existing urban development proposed for annexation shall be added to the City only if the following criteria are met. The proposed annexation area shall:

1. Be within the Urban Services Boundary and adjacent to existing city boundary.
2. Have facilities brought up to City standard prior to or concurrent with annexation.
3. Have costs of service extensions borne entirely by owners of annexing properties and not by existing City taxpayers or ratepayers, or, have a financing mechanism in place prior to annexation.

POLICY GM-4 URBAN SERVICES AND URBAN SERVICES BOUNDARY

Objective. Define the boundary that limits the extent of City services and urban uses, within the City's incorporated area and Sphere of Influence. Extend City services to urban uses within the urban services boundary when provision of those services will not exceed the City's planned system capacities

GM-4a  Urban Services Boundary. The City shall maintain an Urban Services Boundary, beyond which urban services shall not be provided (except as provided for in Policy GM-4b), and urban development shall not be approved (see Figure GM-b). Rural residential development may be approved outside the Urban Services Boundary only if the development would not require the extension of water, sewer, and other public facilities. The area within the Urban Services Boundary shall be annexed at the time of development.

Any changes to the Urban Services Boundary shall be based on an analysis of soil type, vegetation, topography (slope), availability of public water and sewer services, existing property lines, existing land use, and potential for development. The boundary shall not be extended into the prime agricultural land or flood-prone areas on the west and south, nor extend past the Mad River on the north. To the east, the boundary shall not be extended into the steeper portions of Fickle Ridge, as designated on the General Plan Map. Parts of the Jacoby Creek and Bayside areas are included within the urban services boundary.

Only the Agriculture- Exclusive [A-E], Natural Resource [NR], and Public Facilities [PF] land use designations shall be applied to areas outside the Urban Services Boundary and within the Coastal Zone.

GM-4b  Services outside City boundary. The City shall not extend sewer mains or new water mains or provide new service connections to portions of the Planning Area outside the City Limits. However, the City may contract to provide sewer services to other service districts subject to the following guidelines:

1. Only those areas with existing contracts as of December 31, 1998 shall be served. No new contracts for services shall be approved.
2. No new connections shall be allowed to the sewer lines in the area between the City Limits and the Arcata Planning Area Boundary.

GM-4c  Requirements and procedures for modifying Urban Services Boundary. The following findings must be made to modify the Urban Services Boundary:

1. There are existing urban uses or urban uses designated on the land use plan map for the area being considered.

2. There is sufficient existing or planned infrastructure capacity to extend water, sewer, police protection, and other services, without reducing service standards for other areas.
3. The area to be served is adjacent to existing urban development.
4. The area to be served is within the City limits or Sphere of Influence.
5. City services extensions will not adversely impact natural resources in the area.

2.6 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE	RESPONSIBLE PARTY	TIME FRAME
LU-1	Annexation Procedures (LUC Amendment) Add City annexation criteria and procedures to the City's LUC (formerly LUDG) for consistency with General Plan policies.	Community Development Dept./ Planning Commission	Year 1
GM-1	Sphere of Influence/Planning Area Application Review Develop memorandum of understanding (MOU) between City of Arcata, Humboldt County, and LAFCo for review of development and use permit applications.	Community Development Dept.	Year 1
GM-2	Memorandum of Understanding (MOU) with County Negotiate a MOU with Humboldt County that provides for City review and input on all proposed actions on Sphere of Influence/Planning Area lands.	Community Development Dept.	Year 1
GM-3	Urban Services Boundary Update Title 5 and Title 7 of the Arcata Municipal Code to define and describe criteria for modifying Urban Services Boundary, consistent with General Plan policy.	Community Development Dept./ Planning Commission	Year 1
GM-4	Update Sphere of Influence Boundary Comprehensively evaluate the Sphere of Influence Boundary to ensure that City growth and resource protection objectives are being met.	Community Development Dept.	Every 5 Years
GM-5	Prezoning Ordinance Prepare and adopt a prezoning ordinance that does not allow resource lands to be prezoned, but requires consideration of land use designations at time of annexation.	Community Development Dept.	Year 2
GM-6	Local Agency Formation Commission Submit changes in Sphere of Influence and updates of maps to LAFCo, and request that maps be updated.	Community Development Dept.	Year 5

TRANSPORTATION ELEMENT

2.7 INTRODUCTION

Transportation concerns how people and goods move through and around the City. The transportation element addresses how roadway, transit, rail, freight, bicycle, and pedestrian systems can be planned to achieve maximum individual mobility in a manner consistent with community character and environmental protection. California law requires that transportation and land use policies be closely correlated. The Arcata General Plan accomplishes this correlation in two ways. First, travel demand has been forecasted based on the amount and distribution of growth allowed by the land use plan. Second, the policies of the transportation, land use and air quality elements have been interwoven to provide a balance between land uses and the transportation facilities that serve them. The overall theme of this element is achieving a balanced transportation system.

Overview of Existing and Future Transportation Conditions

Existing Roadway System. Arcata's pattern of highways and streets is similar to many small and rural communities. The central business district has a traditional grid pattern of streets, with a one-way couplet system comprising the primary arterial. A non-grid series of arterial and collector streets surrounds the central business district and serves outlying residential subdivisions, neighborhood shopping centers, Humboldt State University, and industrial areas. On the outer edges of Arcata, the transportation system is comprised of rural roads and highways serving isolated farms and residences. Arcata is bisected by the State Route 101 freeway, the main state route serving the North Coast of California from San Francisco to Oregon.



Functional Classifications of the Street System. Arcata's existing and planned primary streets and their functional classifications are shown in Figure T-a. The functional classification system is described in the following paragraphs.

Freeways and Highways. Freeways are high speed facilities with restricted access that move traffic on an intercity or regional basis. Access to freeways is limited to grade-separated interchanges. Routes 101 and 299 are designated as freeways. Highways are also high-speed facilities, but with fewer restrictions on access and at-grade intersections. Route 255 is designated as a highway.

Arterial Streets. The primary function of arterial streets is to provide intracity mobility as efficiently as possible. In addition to interconnecting the various parts of the city, arterial streets also provide some access to abutting lands. Compared to other communities, arterials in Arcata have fewer traffic control devices at intersections. As of 1998, all of the traffic signals in Arcata were located on state facilities. Examples of arterials include the “G” and “H” Street one-way couplet, Alliance Road, Samoa Boulevard and L.K. Wood Boulevard.

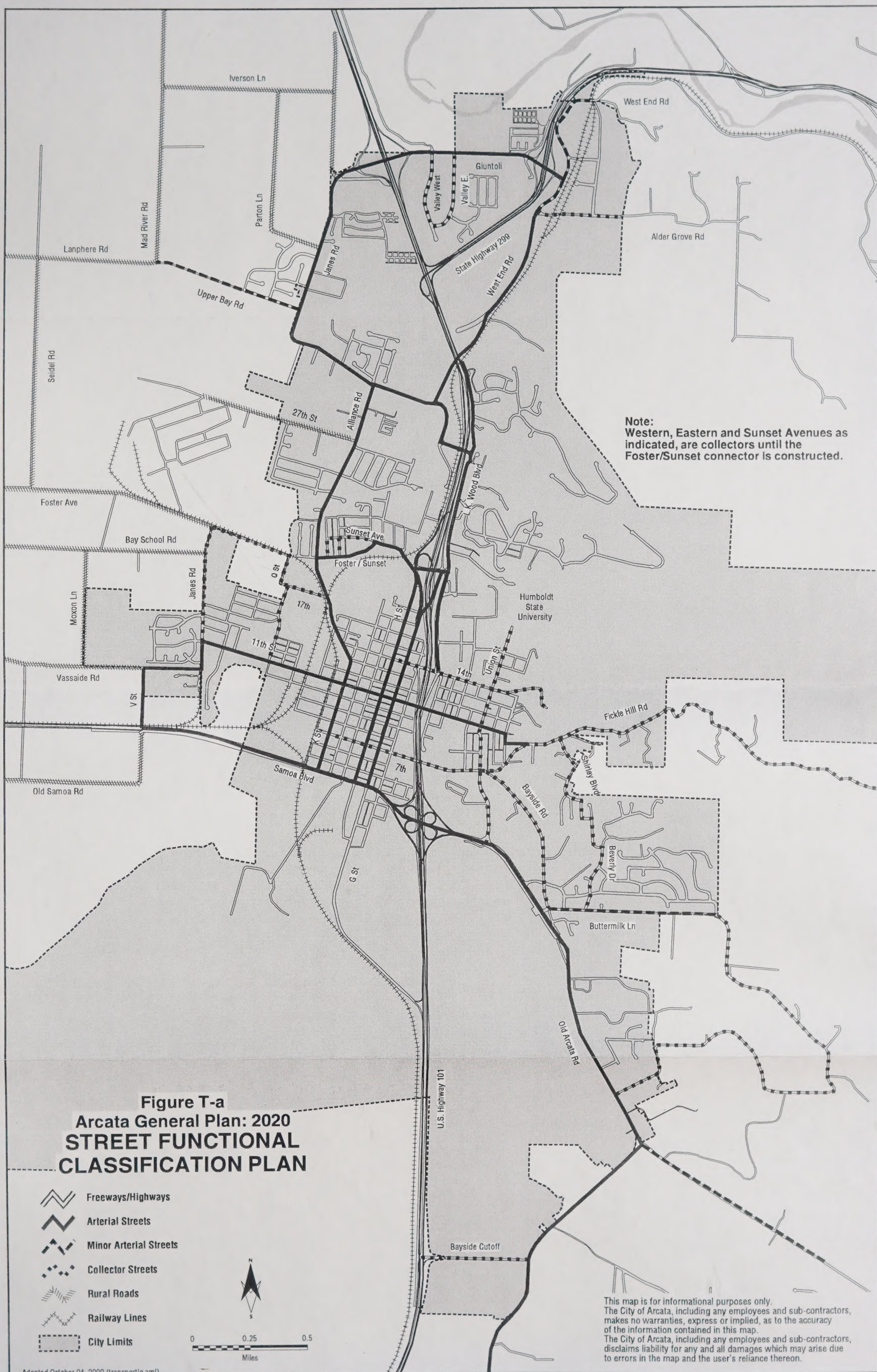
Minor Arterials. Local streets, while providing access to development on adjacent lands, primarily provide mobility between arterial and collector streets. Examples include Buttermilk, Jacoby Creek (within the sphere of influence) West End, Union, and Upper Bay Road.

Collector Streets. Collector streets provide both mobility and access to land in about equal proportions. These roadways move vehicular, pedestrian, and bicycle traffic within and between residential, commercial, and industrial areas. As the name implies, collector streets are intended to collect traffic from local streets and channel it to the arterial street system. Examples of collector streets include 7th Street, 14th Street, Union Street, Buttermilk Lane, and Fickle Hill Road.



Local Streets. Local streets mainly serve to provide access to development on abutting parcels of land. These low-speed roadways provide access between land uses and collector streets. Local streets serve all types of land use including residential, commercial, and industrial. Often, local streets in residential areas are utilized by through traffic, resulting in complaints from residents about speeding and high traffic noise volumes.

Rural Roads. Rural roads are generally two-lane unimproved facilities located on the outer edges of the community. Their primary function is to provide connection and access to farms, isolated residential areas, and industrial uses. Rural roads usually do not have typical urban improvements such as underground drainage, lighting, sidewalks, or curbs and gutters. Examples of rural roads in the Arcata area include Mad River Road, Upper Bay Road, Jackson Ranch Road, the western portion of Foster Avenue, and Jacoby Creek Road.



Existing and Projected Traffic Volumes and Intersection Levels of Service.

Existing and projected future average weekday traffic volumes are shown for selected street locations in Figure T-c. Existing volumes were established with traffic counts conducted in 1996. Projected traffic volumes were developed using the Arcata Citywide Traffic Model. The model was created to evaluate three potential year 2020 growth or “buildout” scenarios for Arcata. The traffic volumes reported in Figure T-c represent the buildout scenario associated with the land use plan. Table T-1 provides levels of service definitions for intersections. Existing and projected future volume/capacity ratios and afternoon peak hour levels-of-service for key intersections are shown in Table T-2. The locations of key intersections analyzed are shown in Figure T-b.

Traffic Volumes. Arterial streets with the highest daily traffic volumes are Samoa Boulevard, Alliance Road, Spear Avenue, “K” Street, and 11th Street. Collector and local streets carry considerably less traffic than arterial streets. The highest projected traffic volume on a surface street is on Samoa Boulevard west of State Route 101, with an average daily volume of over 17,000 vehicles. The largest percent increases in daily traffic volumes are on Alliance Road, “K” Street, and 11th Street east of “K” Street. Projected future traffic volumes on State Route 101 range from nearly 41,000 vehicles per day north of Arcata to 43,000 vehicles per day south of the City. Traffic volumes on Highway 299 east of Arcata are projected to increase from about 10,000 vehicles per day to over 16,000. Traffic volumes on these freeways reflect continuing growth in areas outside Arcata that will result in increased through traffic, particularly McKinleyville to the north along State Route 101.

Intersection Levels-of-service. Level of service (LOS) is a qualitative and quantitative description of intersection operations defined in terms of a letter grade and either the volume to capacity ratio or total stopped delay per vehicle during the peak hour. Levels of service range from LOS A, representing free flow conditions to LOS F which signifies excessive delays, long vehicle queues, and generally unacceptable conditions. The level of service criteria, defined in the 1995 Highway Capacity Manual prepared by the Transportation Research Board, are used by local agencies nationwide to establish standards of acceptability. What is considered acceptable may vary from one jurisdiction to another.

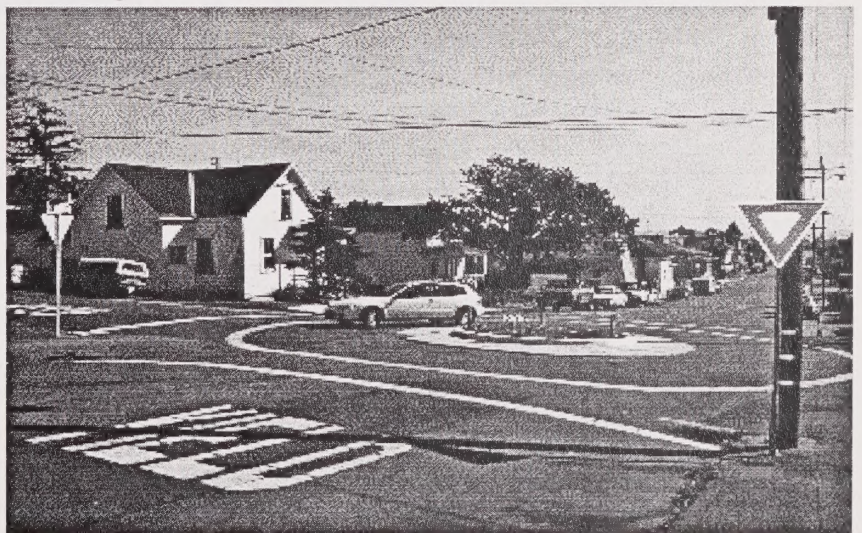
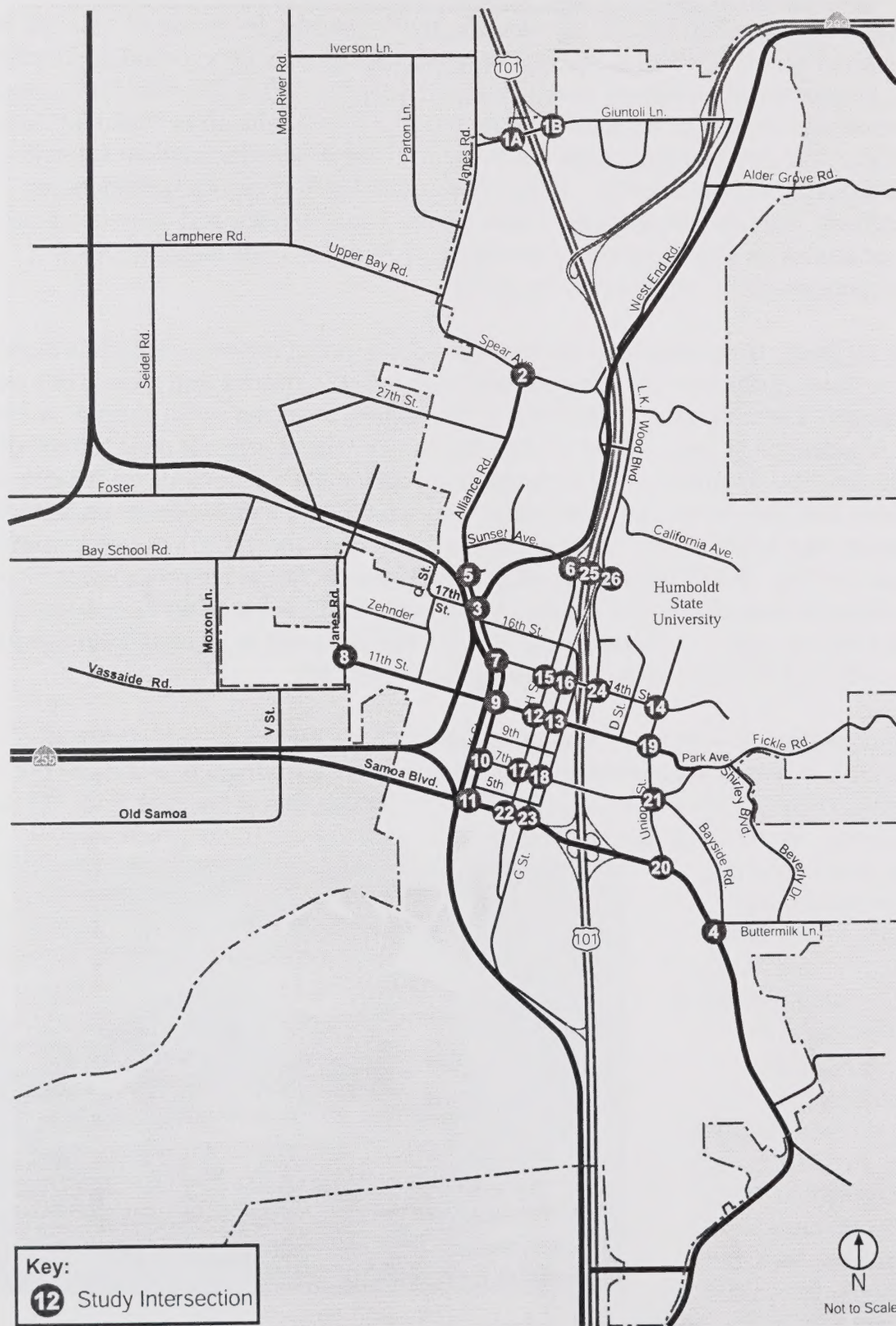


Figure T - b Key Intersections



Level of service for a signalized intersection is defined by its volume to capacity ratio. A ratio of 1.00 indicates that the intersection's volume equals its capacity. At unsignalized intersections, the total stopped delay is applied only to vehicles required to stop.

TABLE T-1 LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS

LEVEL OF SERVICE	SIGNALIZED INTERSECTIONS	UNSIGNALIZED INTERSECTIONS
A	Uncongested operations; all queues clear in a single cycle. Volume to capacity ratio of 0.00 to 0.60.	No delay for stop controlled approaches. Delay equals 0 to 5 seconds.
B	Uncongested operations; all queues clear in a single cycle. Volume to capacity ratio of 0.61 to 0.70.	Minor delay for stop controlled streets. Delay equals 5.1 to 10 seconds.
C	Light congestion; occasional backups on critical approaches. Volume to capacity ratio of 0.71 to 0.80.	Moderate delay for stop controlled approaches. Delay equals 10.1 to 20 seconds.
D	Significant congestion of critical approaches but intersection remains functional. Some vehicles required to wait through more than one cycle during brief periods. No long queues formed. Volume to capacity ratio of 0.81 to 0.90.	Long delay for stop controlled streets. Delay equals 20.1 to 30 seconds.
E	Severe congestion with long standing queues on critical approaches. Blockage of intersection may occur if intersection does not provide protected left turns. Queues may extend into adjacent intersections. Volume to capacity ratio of 0.91 to 0.99.	Very long delays for stop controlled intersections, reaching level of tolerance for average driver. Delay equals 30.1 to 45 seconds.
F	Total breakdown; stop and go operations. Volume to capacity ratio of 1.00 or greater.	Extreme congestion, intolerable delay for stop controlled vehicles. Delay equals 45.1 seconds or greater.

Source: 1994 Highway Capacity Manual (Special Report 209) & Circular 212, Transportation Research Board. Delay for unsignalized intersections is based on average stopped delay in seconds per vehicle.

Table T-2 identifies the existing and projected service levels at the two signalized and twenty-one unsignalized key intersections within the City. Projected service levels are based on the estimated buildout of the land use plan by the year 2020.

Figure T - c Traffic Volumes

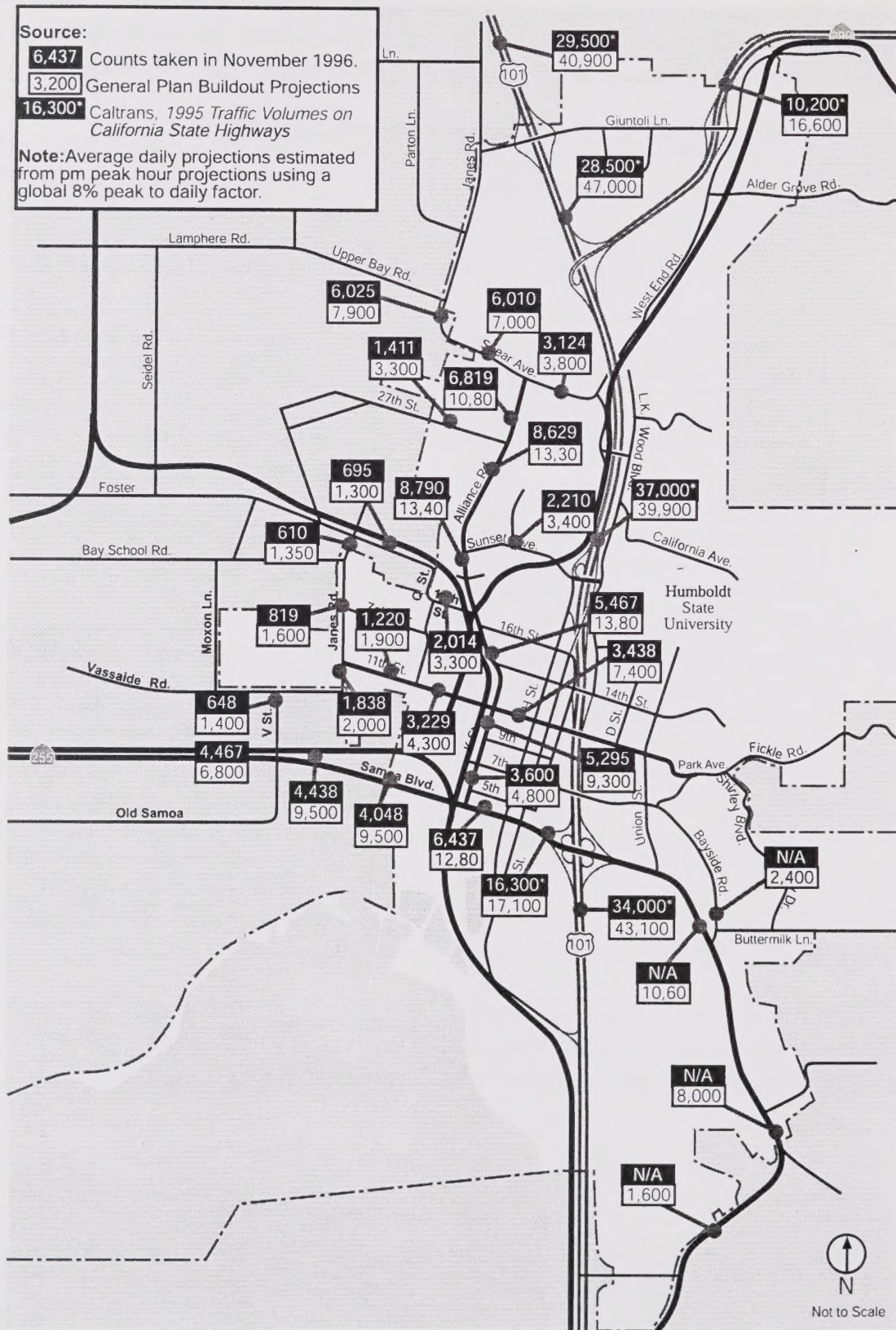


TABLE T-2 AFTERNOON PEAK HOUR INTERSECTION SERVICE LEVELS

SIGNALIZED INTERSECTIONS¹	EXISTING		PROJECTED	
	V/C RATIO	LOS	V/C	LOS
23) G Street / Samoa Boulevard	<1	A	<1	A
22) H Street / Samoa Boulevard	<1	A	<1	A
Unsignalized Intersections¹	Delay	LOS	Delay	LOS
1A) Giuntoli / 101 SB Ramps	8	B	>45	F
1B) Giuntoli / 101 NB Ramps	3	A	>45	F
2) Alliance Road / Spear Ave.	5	A	6	B
3) Alliance Road / 17th Street	1	A	14	C
4) Bayside Road / Crescent Way	4	A	7	B
5) Alliance Road / Foster Ave.	1	A	11	C
6) Sunset Ave. / "G" & "H" Streets	4	A	9	B
7) Alliance Road / 14th Street	1	A	4	A
8) Janes Road / 11th Street	2	A	5	A
9) K Street / 11th Street	6	B	10	B
10) K Street / 7th Street	1	A	9	B
11) K Street / Samoa Boulevard	>45	F	>45	F
12) H Street / 11th Street	7	B	15	C
13) G Street / 11th Street	10	C	23	D
14) Union Street / 14th Street	2	A	5	A
15) H Street / 14th Street	7	B	12	C
16) G Street / 14th Street	12	C	16	C
17) H Street / 7th Street	4	A	7	B
18) G Street / 7th Street	4	A	11	C
19) Union Street / 11th Street	2	A	3	A
20) Union Street / Samoa Boulevard	4	A	>45	F
21) Union Street / 7th Street	3	A	4	A
24) L.K. Wood Blvd. / 14th Street	5	A	5	B
25) Sunset Ave. / US 101 NB Ramp	2	A	10	B
26) Sunset Ave. / L.K. Wood Blvd.	8	B	11	C

¹ See Figure T - b for intersection locations. V/C Ratio = volume to capacity ratio.
 < less than, > greater than.

All of the intersections analyzed presently operate at LOS C or better with an average delay of twelve seconds or less per vehicle in the afternoon peak hour. The one exception is the intersection of "K" Street with Samoa Boulevard, which operates at LOS F for the southbound

to eastbound left turn. This movement must wait for gaps in both directions of traffic on the four-lane segment of Samoa Boulevard.

Table T-2 also presents the projected afternoon peak hour intersection levels of service for the buildout scenario. At buildout, the two signalized intersections ("G" and "H" Streets at Samoa Boulevard) continue to operate well under capacity at LOS A. Two of the City's unsignalized intersections are projected to operate at LOS F. These are:

1. Giuntoli Lane/US 101 Southbound Ramps – failed service level is for left turn movement from the southbound off-ramp approach onto Giuntoli Lane. This intersection meets the Manual of Uniform Traffic Control Devices' (MUTCD's) peak hour volume warrant for signalization. This intersection should be monitored for possible installation of a traffic signal, all-way stop control, or traffic roundabout.
2. Giuntoli Lane/US 101 Northbound Ramps – failed service level is for left turn movement from the northbound off-ramp approach onto Giuntoli Lane. This intersection meets Manual of Uniform Traffic Control Devices (MUTCD's) peak hour volume warrant for signalization. This intersection should be monitored for possible installation of a traffic signal, all-way stop control, or traffic roundabout.

Other intersections which operate near or over capacity include the unsignalized intersection of "K" Street/Samoa Boulevard. This intersection currently operates at LOS F for the southbound left turn onto Samoa Boulevard, and continues to operate poorly for this movement with buildout under the land use plan. All of the remaining unsignalized intersections are projected to operate at LOS D or better. Most intersections, however, operate at LOS A or LOS B. Existing and projected peak hour service levels are based on existing intersection control and lane configurations as of 1998.

Improvements anticipated by this plan will likely improve

the LOS to acceptable levels for all intersections.



Existing and Projected Transit Ridership. The Arcata & Mad River Transit System (A&MRTS) and Humboldt Transit Authority are the two transit systems providing service in the City of Arcata. Transit services are offered along major streets in the city and to major inter-route transfer points including the Arcata Transit Center and Humboldt State University (HSU). HSU student ridership is significant during the school season when extra shuttles are provided to accommodate overflows in the morning peak hour. Table T-3 shows existing and projected A&MRTS bus ridership.

During the school season, A&MRTS ridership increases significantly, by more than 150%. As of 1998, HSU subsidized student bus fares by \$0.60 resulting in increased ridership and reduced vehicle travel to the university. The subsidy is funded through parking fines at the University. A 1995 survey indicated that 75% of A&MRTS riders are traveling to and from school, 12% for work, and the remaining 14% for various purposes including shopping, recreational, and personal trips.

TABLE T-3 A&MRTS RIDERSHIP SUMMARY: EXISTING AND PROJECTED

PASSENGER TYPE	AVERAGE SUMMER MONTHLY RIDERSHIP	AVERAGE SUMMER DAILY RIDERSHIP	AVERAGE SCHOOL SEASON MONTHLY RIDERSHIP	AVERAGE SCHOOL DAILY RIDERSHIP
All Passengers	5,900	300	14,900	850
Students			11,000	750
DAILY STUDENT RIDERSHIP BY PERIOD				STUDENT RIDERS DURING PERIOD
7 to 11 AM				400
11 to 3 PM				250
3 to 7 PM				200
PM Peak Hour - All Passengers				70
Source: A&MRTS superintendent Larry Pardi.				
Note: A&MRTS provides extra shuttles to HSU during school season to accommodate overflow in the morning peak, extra shuttles are not required in the afternoon peak, but buses have standing room only.				
PROJECTED A&MRTS INCREASE IN RIDERS (AT 2020 LAND USE PLAN BUILDOUT)				
	1% Increase in Riders	3% Increase in Riders	5% Increase in Riders	
Passengers	62	183	304	
Note: Increase in daily ridership based on projected land use in traffic analysis zone's [TAZ's] within 1/4 mile of transit corridor stops and 1990 census mode split within each TAZ.				

In 1997, fares represented 20% of the A&MRTS capital and operating costs. The balance of the costs are funded through Transportation Development Act (TDA) funds (70%), State Transit Assistance (STA) funds (5%), and Federal Transit Administration (FTA) Section 18 funds (5%). The two A&MRTS fixed routes serve most of the City, and most points are within 1/3 mile of a bus stop. As of 1998, the system runs on weekdays from 7:00 AM to 7:00 PM with sixty-minute headways. Saturday service is from 9:00 a.m. to 5:00 p.m. with 120-minute headways. In addition to fixed routes, A&MRTS provides "demand responsive" dial-a-ride service. This service accommodates about fifteen to twenty passengers per day. The majority of these passengers are elderly or disabled with destinations to the Mad River Adult Day Health Center.

The Humboldt Transit Authority provides regional public transportation through the Redwood Transit System (RTS). This fixed route system serves cities along the Highway 101 corridor from Trinidad to Scotia. The RTS has four stops in Arcata including Humboldt State University and the Arcata Transit Center. The City of Arcata contributes to the funding for RTS. The Arcata Transit Center, located on "F" Street between 9th and 10th Streets, provides a centralized transit facility for buses operated by A&MRTS, RTS, Greyhound, and Amtrak. The Transit Center provides a park-and-ride lot and secure bicycle facilities.

The A&MRTS 1995 Transit Development Plan projected a 16% increase in ridership between 1995 and the year 2000 based on an equal projected increase in population. The plan recommends service improvements comprised of redesigning the present "Red Route" creating a more direct and faster route with consistent thirty-minute headways between downtown and Humboldt State University, and thirty-minute headways between downtown and Sunny Brae. If additional resources become available, the plan recommends providing evening service on the Red Route during the school season and providing a third bus on the Red Route during the school season to achieve thirty-minute headways.

Table T-3 also presents year 2020 projected increases in average school daily riders. This information is derived from growth in population and employment in Traffic Analysis Zones (TAZs) within transit corridors and 1/4 mile from bus stops, and a 1%, 3% and 5% increase in riders over 1990 census mode split information. While relatively small percentages, the increases represent a large increase in riders for Arcata. A sensitivity analysis indicates that these increases in riders could reduce vehicle trips between 0.5% and 2.3% and reduce annual vehicle miles of travel between 0.2% and 1.1%.

Bicycle and Pedestrian Facilities. Arcata's bicycle transportation system consists of Class II bike lanes and Class III bike routes on public streets. Class II bike lanes are on-street facilities delineated from motor vehicle travel lanes by pavement striping and markings. Class III bike routes are specially designated corridors in which the travel lanes are shared by motor vehicles and bicycles. Arcata presently provides a comprehensive bike lane system connecting most major areas of the City on primary arterial streets. Most Class II bike lanes are located on north-south streets, while Class III bike routes provide east-west connection on key streets. The western portion of the City (west of Alliance Road) is least served by bike lanes, providing an opportunity to expand the bike lane system to encompass more residential areas.



Pedestrian facilities are provided throughout Arcata in the form of sidewalks on public streets. The City's design standard for streets includes five-foot wide sidewalks on both sides of the street with a fifty-foot wide right of way. Many streets, particularly local, collector,

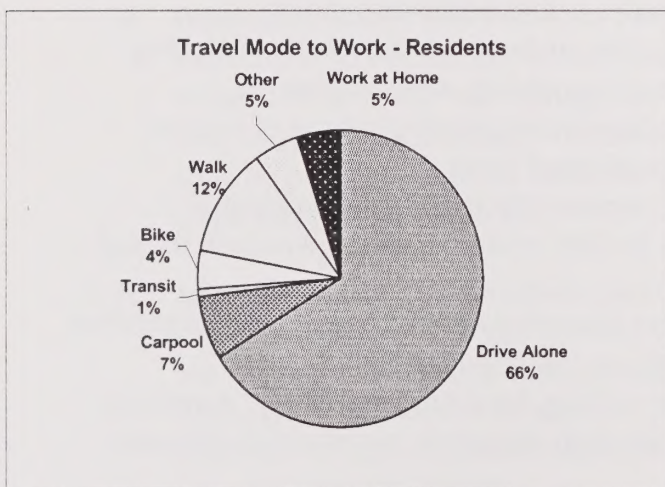
and rural roads, do not have curb and gutters or sidewalks – forcing pedestrians to walk on unpaved shoulders or within the travel lanes. While the downtown and areas surrounding Humboldt State University provide a continuous sidewalk system in other areas of the City, there are many gaps in the sidewalk system. The City's standard five-foot wide sidewalk meets the minimum Americans with Disabilities Act (ADA) requirements, but wider sidewalks are desirable for high-traffic pedestrian locations and to encourage walking. Narrow sidewalks are often obstructed with utility poles, signs, and street furniture, further reducing their effectiveness. In addition, the City's street standards lack sufficient width for a planting strip or street trees, which are important elements in promoting walking as an alternative mode of transportation. Opportunities exist, however, within the standard fifty-foot wide right of way to provide street trees in planter boxes located in the parking lane, or to add a planting strip between the sidewalk and travel lanes when new development projects are considered.

Existing Freight and Railroad Transportation Systems. Arcata has designated truck routes on several key arterial and collector streets including Giuntoli Lane, Valley West/Valley East Boulevard, West End Road, Alliance Road, "K" Street, Spear Avenue, L. K. Wood Boulevard, 11th Street, Fickle Hill Road, Janes Road, and Samoa Boulevard. These streets provide intracity connections for freight travel and serve most of the industrial areas of the City. All state facilities including Routes 101, 299, and 255 are designated truck routes.

Arcata has a railroad mainline managed by the North Coast Railroad Authority, with spurs serving industrial properties. Although most rail service was suspended following damage to tracks caused by storms in 1997, the main line and many spurs in Arcata were active prior to that time. They served several industrial uses in the northeast and southwest areas of the City and were used to move freight between Arcata and Eureka. Service consisted of one round trip at night between the hours of 7:30 p.m. and 7:30 a.m. The North Coast Railroad

Authority has permitted passenger service between Arcata and Eureka on certain holidays each year as special event excursions. There has been discussion about initiating regular passenger rail service between Arcata and Eureka, but no plans have been developed.

Existing Modes of Travel. Based on 1990 census data, the majority of Arcata residents drive alone to work (66%) as shown in the accompanying figure. Walking and bicycling modes make up 12% and 4% respectively.

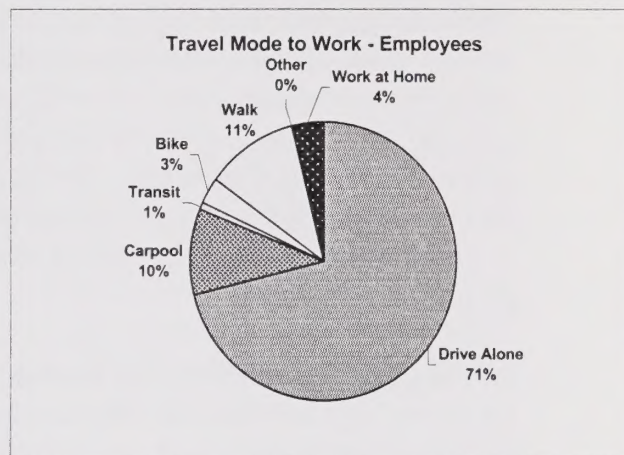


About 5% of Arcatans work at home. Public transit is the least utilized mode of travel at 1%. While low on a citywide basis, public transit usage is higher in some areas of the City when examined at the census block level. Transit mode of travel in the downtown area, for

example, is about 8%. Similarly, walking and bicycling modes are high in certain areas, up to 16%. Travel modes for people who work in Arcata are similar to those of residents, with the exception that more employees drive alone (71%) and carpool (10%). Compared to residents, fewer employees walk (11%) and bike (3%), while the same amount (1%) use public transit.

Existing Travel Demand Management. The most comprehensive use of Transportation Demand Management (TDM) measures is by the City's largest employer, HSU, which has the following programs:

1. HSU subsidizes free travel on A&MRTS buses for students, faculty, and staff. This subsidy covers \$3.00 for every \$11.00 spent for transit service.
2. The University's "Ease the Crunch" campaign offers information to students explaining the proximity of the campus to residential areas and the convenience of transit use. The information includes transit routes and subsidy programs available.
3. HSU provides approximately 2000 bike racks on campus to ensure safety of bicycles.
4. HSU purchased bike racks for buses, enabling members of the university community to combine bus and bicycle commutes to and from the campus.
5. HSU provides the fee for bicycle licensing.



Guiding Principles and Goals.

- A. Provide a transportation system which allows safe and efficient travel.
- B. Create a transportation system which provides a choice of travel modes.
- C. Provide for increased use of alternatives to the single-occupant vehicle, including walking, bicycling, public transit, carpooling/vanpooling, and ridesharing.
- D. Manage the street and highway system to promote more efficient use of existing capacities rather than increase the number of travel lanes.
- E. Create a transportation system which will improve the livability of residential neighborhoods, including use of methods to calm or slow traffic and reduce through-traffic on local neighborhood streets.
- F. Educate residents, employees, and students about the importance of using alternative forms of transportation instead of the single-occupant automobile.
- G. Promote land use patterns that encourage walking, bicycling, and public transit use.
- H. Establish a set of curb parking prices that are high enough to maintain an adequate supply of available spaces.

2.8 POLICIES

The Transportation Element includes the following policies:

- T-1 Balanced Transportation System with Choice of Modes
- T-2 Travel Demand Management
- T-3 Bus Transit System
- T-4 Streets and Highways Plan
- T-5 Bicycle and Pedestrian Facilities
- T-6 Parking Supply and Parking Management
- T-7 Rail and Freight Transportation
- T-8 Financing Transportation Improvements

POLICY T-1 BALANCED TRANSPORTATION SYSTEM WITH CHOICE OF MODES

Objective. Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes.

- T-1a **Investment in alternative modes.** In order to provide a realistic and cost-effective balance between travel modes, the City shall emphasize investment in alternative modes (bikeways, etc.) as a priority over increasing vehicular capacities of streets.
- T-1b **Interconnections and transfers between travel modes.** The City shall provide and maintain a Transit Center to facilitate interconnection and transfers between bus routes and systems. As funding permits, Transit Center facilities shall be improved to encourage its use as a multi-modal transfer point. Pedestrian and bicycle amenities shall be provided at other locations which serve as modal transfer points such as bus stops and park-and-ride lots.
- T-1c **Intercity travel.** The City shall coordinate with Humboldt County and Caltrans to provide adequate facilities for vehicles, buses, and bicycles to serve intercity demand. Joint efforts may include transportation improvements outside of Arcata which serve intercity travel, such as bicycle links, timed-transfer bus stops, park-and-ride lots, and regional transit service and development of park-and-ride lots in Arcata to reduce intercity vehicular travel.
- T-1d **Critical transportation facilities.** Critical transportation facilities for emergency vehicle access and emergency evacuation shall be maintained and improved as a

priority need. Critical transportation facilities include the major routes into and out of the City such as Highways 101, 299, and 255, their interchanges with City streets and primary intra-city street connections including Samoa Boulevard, 11th Street, "G" and "H" Streets, Sunset Avenue, L.K. Wood Boulevard, Alliance Road, Janes Road, and Giuntoli Lane. Due to the potential for structural failure of these facilities in a seismic emergency, alternative routes and procedures for their use shall be identified.

- T-1e **Parking and public transit service study.** The City shall undertake a comprehensive study of parking and public transit service options for the downtown/uptown area and HSU, with cost/revenue implications presented for each option. This study shall be undertaken jointly with HSU.

POLICY T-2 TRAVEL DEMAND MANAGEMENT

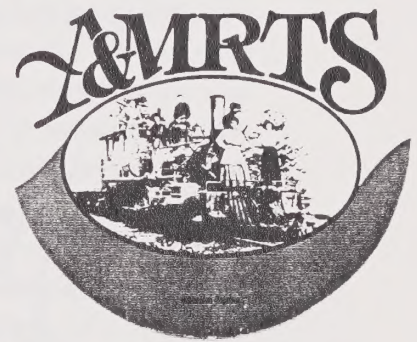
Objective. Reduce the percentage of automobiles and reduce the annual vehicle-miles of travel.

- T-2a **Land use development patterns.** The City encourages and supports travel demand management efforts. The City shall promote land use and development patterns that encourage walking, bicycling and transit use. In recognition of the link between land use and transportation, the land use plan shall discourage low density, homogenous land-use patterns that foster automobile travel and are impractical to serve with transit. Land use planning shall emphasize high density and mixed land-use patterns which translate into higher transit and pedestrian travel in the downtown and neighborhood commercial areas. Infill, redevelopment, and reuse of underutilized property at higher densities shall be encouraged prior to outward expansion of City boundaries. The following land use measures are emphasized:
1. Mixed-use neighborhood centers within transit corridors which include housing and commercial services near employment.
 2. Land use patterns which maximize linking trip opportunities by assembling uses, thus allowing people to take care of a variety of daily needs with a single trip.
 3. Clustering of higher density housing and incorporation of residential apartments on upper floors of buildings in the downtown area.
 4. Integration of new housing into neighborhood shopping centers, including Sunny Brae, Westwood, and Valley West.
 5. Pedestrian-oriented land use and urban design, including the following elements:
 - a. Pedestrian-scale block patterns.
 - b. Incorporate pedestrian and bicycle amenities into public and private projects.
 - c. Design streets for multi-modal use.
 - d. Integrate transit stop facilities into public and private projects.
 - e. Orient buildings and houses to street.

- f. Provide attractively landscaped streets and buffers.
 - g. Preserve existing and historic urban fabric.
 - h. Eliminate blank wall facades.
 - i. Incorporate bicycle routes and enhancements in public and private projects.
- 6. A fixed urban services boundary to reduce sprawl and infrastructure costs.
- 7. Focused growth along existing or planned transit corridors rather than extension of transit to serve new isolated development.
- 8. Prevention of large areas of single uses. Isolated single-use developments at the edge of the City could encourage automobile travel for commuting and errands.
- 9. Provision of convenience retail and services in ground floor space in the downtown to accommodate the needs of employees and reduce the need for mid-day automobile trips.

POLICY T-3 BUS TRANSIT POLICY

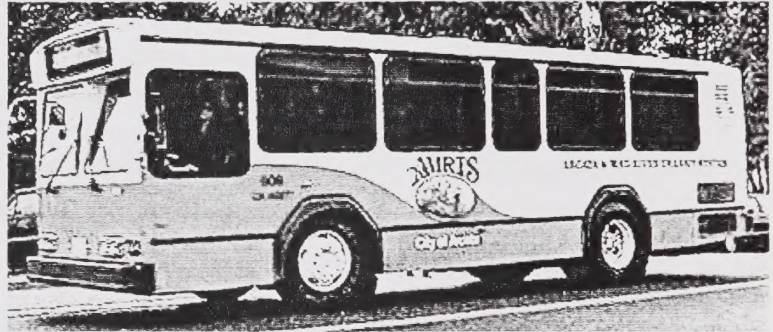
Objective. Maintain a bus transit system which connects and serves major commercial and employment areas within Arcata, Humboldt State University, public schools, and higher density residential areas. Increase average citywide transit mode share of daily person trips to 5% from the 1998 level of 1%.



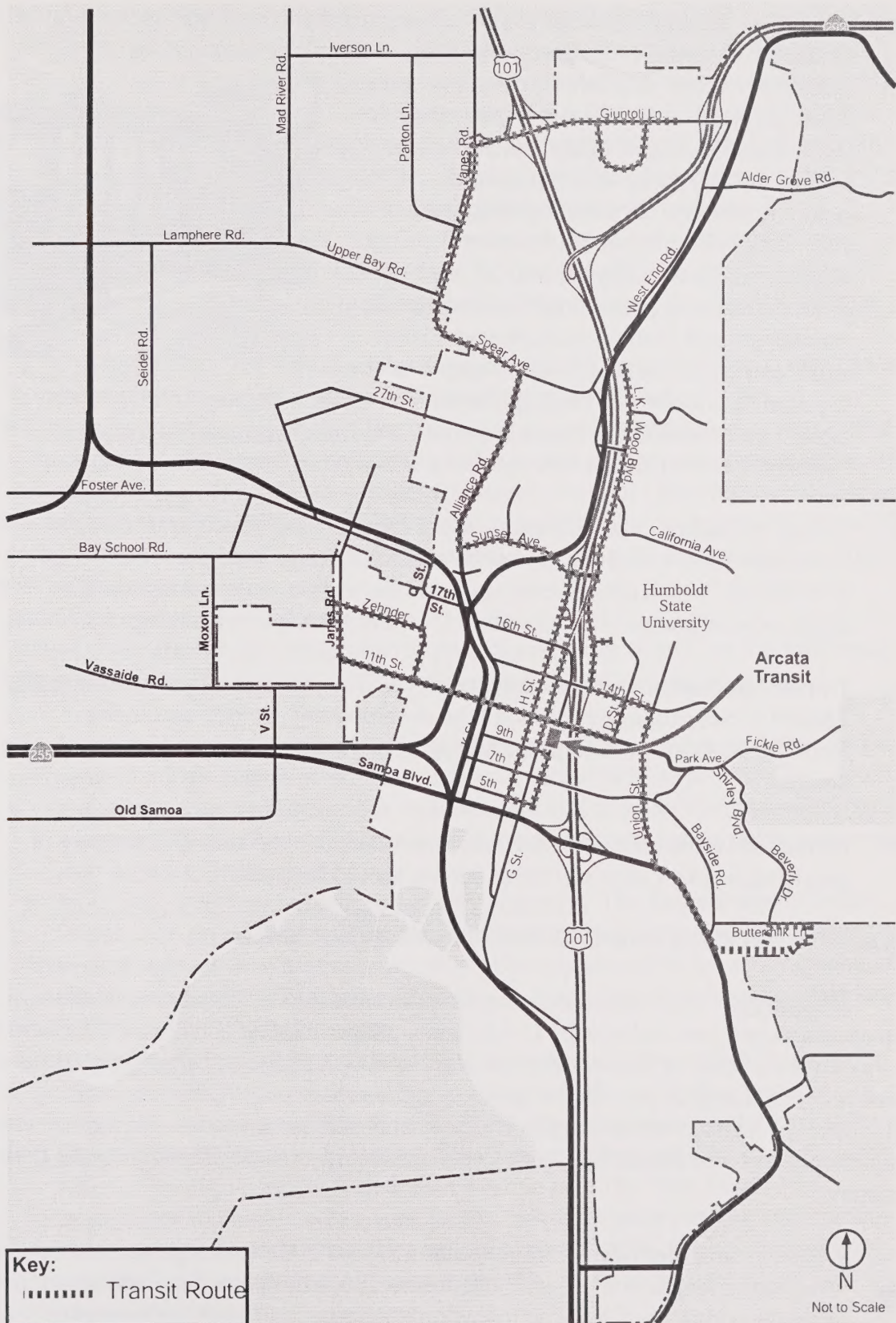
- T-3a **5-year transit plans.** The City shall maintain the existing A&MRTS routes (as shown in Figure T-d), frequency, and level of service until increased demand, additional development, and transit planning studies identify the need for either route modification, an expanded route system, or increased service on existing routes. The transit planning studies should evaluate the cost-effectiveness and feasibility of increased routes and service based on projected capital and operating costs, fare box recovery, and federal subsidies (see Policy T-3c for planning criteria).
- T-3b **Regional transit service.** Short- and long-range transit plans shall be coordinated with the regional transit service provided by the Redwood Transit System. The City supports regional transit plans which improve service and timed transfers, and reduce headways for intercity travel.
- T-3c **Bus route system.** Public transportation is an enterprise activity and its services must be designed to be as efficient and productive as possible. As a transit operator, the City must balance demand with resources for a sustainable system. The City shall consider adding transit routes or modifying existing transit routes and level of service based on the transit planning efforts described in Policy T-3a. Criteria to evaluate and identify thresholds for changes to the A&MRTS system shall be developed. General

guidelines for planning future routes and service include:

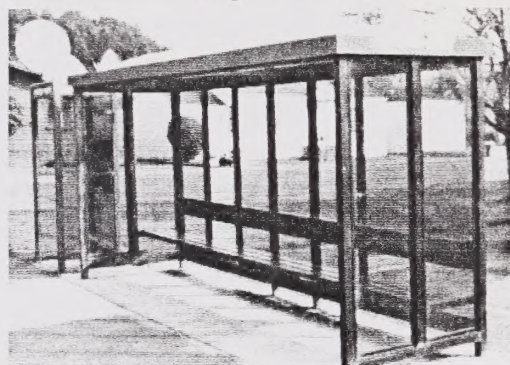
1. Accessibility of route to residents and employees. Calculate the number of people living or working within walking distance of the route (typically 1,000 feet). Assuming 1% to 8% of that population would use transit (based on existing transit mode share by census block), determine if the route will serve an adequate population for cost-effective service.
2. Review the housing density within the proposed route corridor. Minimum densities of at least seven dwelling units per acre are necessary to support local transit service. Ideally, the average housing density within a transit corridor or transit served nodes should range between eighteen to twenty dwelling units per acre, depending on the proximity to stops.
3. Evaluate the efficiency and directness of future routes. Compare bus travel time with automobile travel time to avoid a disproportionality which favors automobile use. Determine if the route requires inefficient loops which take riders out of their way and discourages transit use. Design routes to be as direct as possible with turnarounds at endpoints.
4. Evaluate the diversity of the destinations served. Efficient routes serve a diversity of land uses including residential, employment, schools, and shopping. Evaluate the number of activity centers connected by the route and the transfer opportunities provided.



T-3d Transfers between routes and systems. The public transit system shall provide convenient transfers between routes, other transit services, and other modes of travel. The Arcata Transit Center shall serve as the primary multi-modal transfer station. Bus stops should be located near municipal parking lots or future park-and-ride lots. The A&MRTS and Redwood Transit System schedules shall be coordinated to provide a timed-transfer system at key stops.

Figure T - d A&MRTS Transit Routes

- T-3e **Bus stops.** Existing bus stops should be improved and new bus stops on future routes should be designed with appropriate amenities and features. Design elements include either bus stop lanes or bus turnouts. Bus stop design amenities which increase rider comfort and feeling of safety and encourage walking and bicycling are emphasized, including shelters, benches, lighting, shade trees, signs, information kiosks, waste receptacles, paved surfaces, and secure bicycle parking. Bus stop areas should be consistently maintained and cleaned, including vandalism repair and graffiti removal. Developers shall be required to provide bus stops and amenities on their frontage if the property is located on an existing or future bus route and is an appropriate location for a stop. Pedestrian and bicycle access should be provided to neighborhood bus stops.



- T-3f **Transit subsidies.** The City supports continued A&MRTS contract services with Humboldt State University to provide subsidized fares to its students and employees. This subsidy, which allows these users to ride without cost to the individual, is the single most important Transportation Demand Management strategy for Arcata.
- T-3g **Transit implications of new development.** The public works department and A&MRTS shall evaluate proposed new development projects and make recommendations prior to project approval regarding transit improvements and road designs.
- T-3h **Increased weekend transit service.** The feasibility and cost-effectiveness of providing weekend bus service to Eureka should be studied.

POLICY T-4 STREETS AND HIGHWAYS PLAN AND POLICY

Objectives. Plan an internal street system consistent with Arcata's small-town, non-metropolitan character and which: 1) efficiently utilizes existing facilities and reduces need for investment in new or expanded street and highway facilities or capacities; 2) improves connectivity of streets to provide for direct routes between origins and destinations; 3) has a high quality of regular maintenance and repair; and 4) maintains a level of service which minimizes delays, but allows for higher levels of congestion during the short peak periods on weekdays.

- T-4a **Freeways and Highways.** State Routes 101 and 299 are designated as freeways for their entire length in the City. State Route 255 is designated as both an arterial and a highway within the City. The following standards shall apply to these classifications:

1. Function. The function of freeways is to provide for high speed automobile and freight movement for intercity and regional travel. Freeway access is highly controlled to achieve this function. Freeway operations, design, and maintenance are under the jurisdiction of the State. Highways (Route 255) also function to move automobiles and freight at relatively high speeds with little friction from intersections and conflicting traffic. Access is controlled on highways, but not as restrictive as freeways. [See functional classification map in Figure T-a.]
2. No additional travel lanes. The City does not support development of any additional through-travel lanes to State Routes 101, 299, or 255 in Arcata or nearby areas. Existing and projected traffic volumes do not warrant additional lanes on these facilities.
3. Auxiliary lanes. The City does not support construction of auxiliary lanes between existing interchanges, or any new interchanges, on State Route 101.
3. Interchange improvements. The City supports interchange improvements that reduce potential conflicts created by unrestricted access from freeway off-ramps.
5. Landscaping. The City encourages Caltrans to maintain and improve landscaping along freeway corridors in Arcata and surrounding areas to improve aesthetics, provide a visual and noise buffer, and maintain the rural and small-town character of the region.

T-4b  **Arterial Streets.** Routes designated as arterial streets are shown on the functional classification map in Figure T-a. The following shall apply to these routes:

1. Functional classification and designated routes. Arterial streets are intended to provide a high degree of mobility and serve longer trips within the City. Arterials connect various neighborhoods within Arcata and provide direct connections to the state highway system. Arterials are intended to emphasize traffic movement over access to property.
2. Alternative street cross-sections for arterial streets. The Department of Public Works shall prepare alternative cross-sections for new arterial streets utilizing a smaller right-of-way, and prepare alternative cross-sections for existing rights-of-way that reduce traffic speed and safely accommodate bicycle and pedestrian traffic.
3. Arterial street connectors. Extend existing roads to increase the City's arterial connectivity if proposed development creates significant traffic congestion or overwhelms existing neighborhoods. The Foster Avenue to Sunset connector is a planned road extension if feasible. This project will extend Foster Avenue east of Alliance Road to connect with Sunset Avenue near the State Route 101 interchange to create an east-west facility between Spear Avenue and 14th Street. This extension would bypass the residential neighborhoods on Sunset Avenue, provide a direct arterial connection from Alliance Road to State Route 101, and improve and facilitate bus routing.

4. No additional automobile travel lanes on arterial streets. Street projects to improve traffic flow shall emphasize intersection improvements and facility maintenance. Construction of additional arterial street travel lanes shall be considered only when no other feasible congestion management methods are available.
5. Minimize the installation of new traffic signals. New traffic signals shall be provided only in instances where there is no feasible alternative to relieve a demonstrated safety problem at an intersection (based on documented accidents). Alternatives which shall be studied prior to signals include roundabouts or installation and monitoring of all-way stop signs.
6. Minor improvements at intersections. Minor projects to improve traffic safety include redistributing lane allocations and coordination of traffic signals. Improvement projects shall be designed to accommodate the needs of pedestrians and bicyclists.

T-4c Collector Streets. Routes designated as collector streets are shown on the functional classification map in Figure T-a. The following shall apply to collector routes:



1. Functional classification and designated routes. Collector streets serve to provide access to land use and movement of traffic, pedestrians, and bicycles within residential, commercial, and industrial areas. Collectors generally penetrate, but should not have continuity through residential neighborhoods. Collector streets collect traffic from local streets and distribute it to the arterial street system.
2. Alternative street cross-sections for collector streets. The Department of Public Works shall prepare alternative cross-sections for new collector streets utilizing a smaller right-of-way, and prepare alternative cross-sections for existing rights-of-way that reduce traffic speed and safely accommodate bicycle and pedestrian traffic.
3. No additional automobile travel lanes on existing collector streets. No additional travel lanes are planned on collector streets. If congestion occurs, it shall be managed using alternative methods such as intersection improvements or diversion of trips to other travel modes.
4. Intersection Improvements. No new traffic signals are planned on collector streets. Other alternatives that may be considered to improve safety at intersections include stop signs, roundabouts, or other traffic calming measures.

T-4d Local Streets. All streets within the city not classified in another category in Figure T-a are designated as local streets. The following standards apply to these streets:



1. Functional classification and designated routes. Local streets function to provide access to adjacent land use and exist in any land use setting such as residential, commercial, and industrial areas. Movement on local streets is intended to involve traveling to and from a collector facility. Therefore, the trip length on a

local street is intended to be short, volumes should be low, and speeds slow.

2. Alternative street cross-sections for local streets. The Department of Public Works shall prepare alternative cross-sections for new local streets utilizing a smaller right-of-way, and shall prepare alternative cross-sections for existing rights-of-way that reduce traffic speed and safely accommodate bicycle and pedestrian traffic.

T-4e



Rural Roads. Routes designated as rural roads are shown on the functional classification map in Figure T-a. The following standards shall apply to these roads:

1. Functional classification. Rural roads serve very low density land uses (mostly agricultural and rural residential) outside of the urbanized area of Arcata. Rural roads are usually not intended to serve through traffic, but often accommodate truck traffic related to the land uses served.
2. Maintain rural character. Rural roads shall be maintained in a manner which will retain their rural character and discourage use as alternatives to arterials and highways for longer distance travel.

T-4f

Traffic calming. The City shall employ the following measures to reduce speeds and “calm” traffic in the various neighborhoods:

1. Neighborhood Traffic Management. A Neighborhood Traffic Management Program (NTMP) shall be developed to respond to problems in a consistent and methodical approach. The NTMP should be a two-phase program, with the first phase involving education and community-driven measures, and the second phase involving installation of restrictive physical devices in appropriate circumstances. Neighborhood residents and businesses should be invited to participate in the program so that they can evaluate the benefits and trade-offs of various measures and be involved in the decision-making process.

T-4g

Street closures. All neighborhood streets shall be kept open unless there is a demonstrated safety problem. The following traffic calming measures will keep streets open and safe, and will reduce through-traffic:

1. Full or partial diverters or closures of streets.
2. Median barriers at intersections.
3. Diagonal diverters at intersections.
4. Entrance barriers at beginning of street.
5. Conversion of street to one way.

T-4h

Street maintenance. The Pavement Management System shall be maintained to identify and prioritize street maintenance projects in the City’s Capital Improvement Program (CIP). The maintenance program shall include regular street cleaning and

repair of pavement, sidewalks, and bicycle lanes, and pay particular attention to conditions that discourage bike usage.

TABLE T-4 PASSIVE AND RESTRICTIVE TRAFFIC CALMING MEASURES

PHASE I PASSIVE MEASURES	PHASE II RESTRICTIVE MEASURES
Neighborhood campaigns for traffic safety or speed watch reporting	Traffic circles or roundabouts
Passive traffic controls such as stop signs	Medians
Parking restrictions or modifications	Raised intersections and raised crosswalks
Active police enforcement	Speed humps/speed tables
Pavement markings and signage	Curb extensions at intersections or midblock
Neighborhood gateway features	Chicanes or slow points
Visual cues at neighborhood entries	Narrowing travel lanes
Emphasis on visual rather than physical deterrent	Reduced curb radii
Textured crosswalks	

POLICY T-5 BICYCLE AND PEDESTRIAN FACILITIES

Objective. Create a complete, interconnected bicycle and pedestrian circulation system. Increase the percentages of person trips via walking and bicycling. Provide a pedestrian and bicycle system which serves commuter as well as recreational travel.

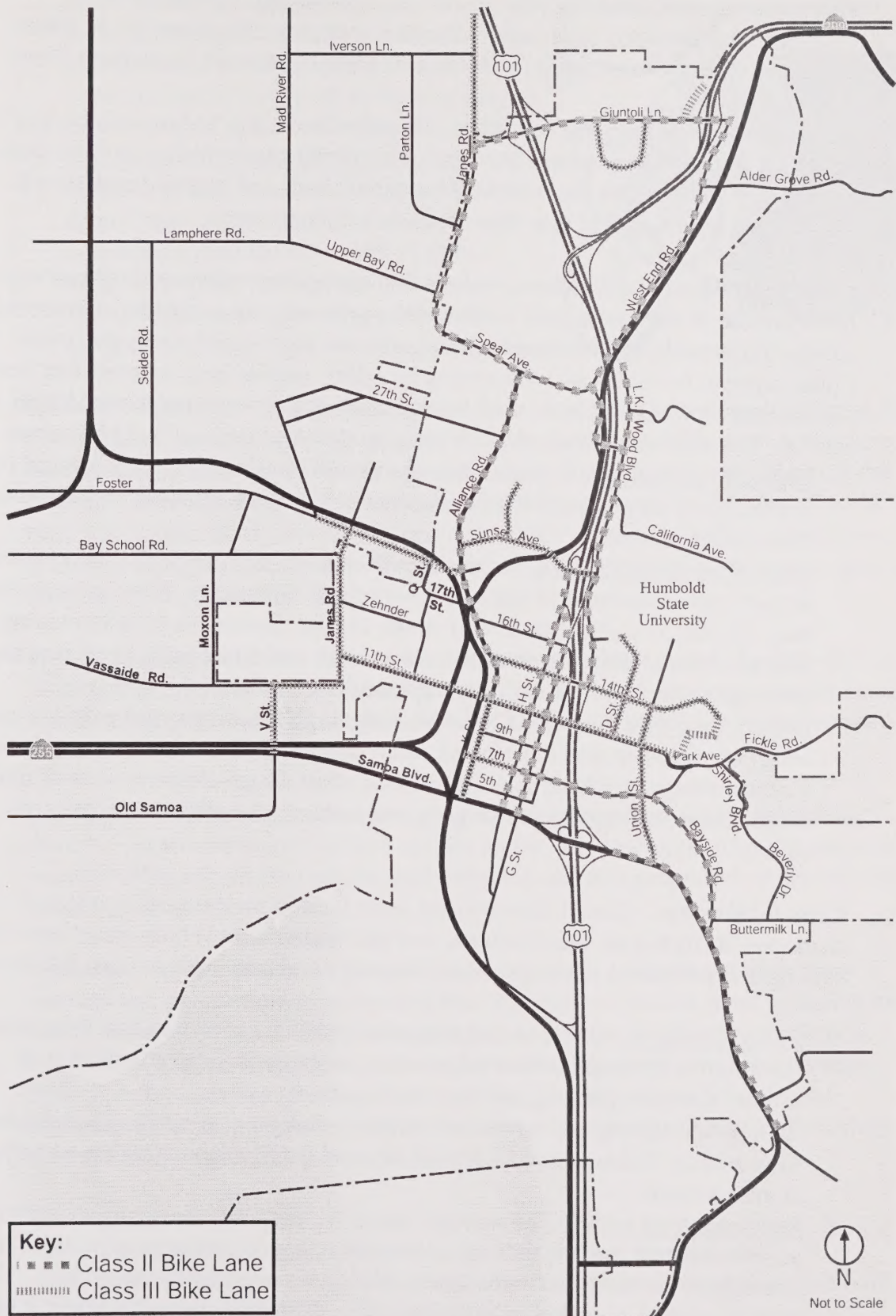
T-5a Overall bicycle route system and connectivity.



The bicycle route system plan is shown in Figure T-e. The bicycle route system shall be improved and expanded as necessary to serve new development and activity centers. Routes that provide access to and between major destinations including public facilities, schools, parks and open space, employment, and shopping, shall be the highest priority. Future improvements may be made which upgrade bike routes to a higher class. The City shall:

1. Regularly (at least every two years) update the Arcata Bicycle Plan and coordinate planning efforts with Caltrans and the Humboldt County Council of Government's bicycle plans and advocacy groups to provide continuous bicycle routes.
2. Maintain existing bicycle routes and provide additional routes where feasible connecting the various neighborhoods with Humboldt State University. Class II bike lanes shall be provided on routes with the highest bicycle demand, or where there is sufficient right of way.



Figure T - e Bikeway Map

3. Improve and maintain bicycle infrastructure including removal of height differences between pavement and gutter pans, smooth pavement on street edges, drainage inlet grates, and street cleaning to remove debris from street shoulders.
4. Consider developing standards for a "Bicycle Boulevard," a low-volume and low-speed through-street where bicycles have priority over vehicles, conflicts between vehicles and bicycles are minimized or eliminated, and bicycle travel time is reduced by removal of stop signs and other impediments.

T-5b **Class I bikeways.** Class I bikeways are within completely separated right of way for exclusive use of non-motorized modes. They generally serve corridors not served by streets and provide a recreational opportunity or a high-speed commuter route. Class I bikeways can be multi-use trails serving bicyclists, pedestrians, rollerbladers, and equestrians. A Class I bikeway shall be included on the proposed Sunset-Foster arterial. The following standards shall apply to development of Class I bikeways:

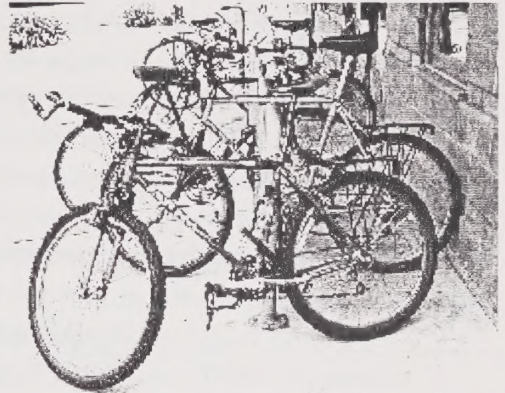
1. Bikeway continuity. Off-street bikeways do not need to be continuous but need to connect to other types of facilities at each end of the bikeway to provide an interconnected system.
2. Right of way opportunities. As opportunities arise, the City shall utilize existing or acquire new easements or right of way for Class I bikeways. Such opportunities may include connecting dead-end streets in new developments with existing neighborhoods, along streets with excess width and unpaved right of way, along drainage channels or creeks, or along abandoned railroad rights of way.
3. Design standards. Two-way Class I bikeways shall be constructed with a minimum width of eight feet and a preferred width of ten feet (five feet for one-way travel). Caltrans design standards shall be used for other design elements such as drainage slope, clearance, signing and striping, and control where bikeways intersect streets.

T-5c **Class II bikeways.** Class II bikeways are lanes located on the outside edge of roadways, including all arterial streets, and delineated from vehicle travel lanes with striping and pavement markings. The following standards apply to Class II bikeways:

1. Design standards. Caltrans design standards shall be used for Class II facilities. Minimum widths are five feet adjacent to on-street parking or vertical curb without on-street parking, and four feet on streets without curb and gutter. Appropriate signing and pavement markings shall be provided to identify the bicycle lane. Caltrans standards shall be used for bike lane markings or transitions at intersections.
2. Required street width. The standard street width of forty-feet curb-to-curb can accommodate Class II bike lanes in both directions if parking is eliminated from one side of the street and vehicle travel lanes are reduced to eleven feet. Bike lanes should be provided in both directions, if feasible, unless the street is one-

way. Streets appropriate for Class II bike lanes include those where on-street parking needs are not critical. Alternatively, prohibition of parking on one side of the street during certain hours of the day may be considered to accommodate bicyclists.

3. Bike lanes in new development areas. New collector streets in new development areas should have a cross-sectional standard with a minimum curb to curb width of forty-eight feet, which can contain two twelve-foot vehicle travel lanes, seven-foot wide parking lanes, and five-foot wide bike lanes.



T-5d Class III bikeways. Class III bikeways are unmarked bicycle routes which share the street with other vehicles. This type of facility is usually established on low-volume local neighborhood streets, but can be located on any type of street. Many of the existing City designated bicycle routes consist of this type of facility. Any Class III bike routes on routes to school with younger bicyclists should have wider outside lane widths (fourteen to sixteen feet). Prohibition of parking during school hours may be considered to achieve the desired width.

T-5e Bicycle parking facilities. Secure bicycle parking facilities should be provided at important activity centers, civic facilities, apartment complexes, employment centers, shopping centers, major bus stops, and schools. Bicycle parking facilities include racks, lockers, and bollards.

Developers shall be required to provide a minimum number of bicycle parking devices at convenient and visible locations within the development. The required number of bicycle parking spaces shall be calculated as a proportion of the number of vehicle parking spaces.

T-5f Pedestrian enhancements. Prioritize implementation of improved pedestrian facilities and enhancements in areas of the city with the greatest need including the Arcata Plaza, Westwood Center area, the Sunset Avenue neighborhood, Samoa Boulevard, Alliance Road, Spear Avenue, Janes Road in the vicinity of the Pacific Union School, and Bayside Road in the vicinity of Jacoby Creek School. The following pedestrian improvements and safety enhancements should be considered in future planning for these areas:

1. Close sidewalk gap.
2. Install vertical curbs to keep vehicles from parking on sidewalks.
3. Reduce street crossing distance with curb extensions and smaller curb radii.
4. Use on-street parking as a pedestrian buffer.

5. Install textured crosswalks.
6. Provide adequate street lighting focused on crossings.
7. Restrict parking near crosswalks to improve sight distance.
8. Install rumble strips on approaches to crosswalks.
9. Plant street trees or place street trees in planters in the parking lane.
10. Relocate intersection stop bars five feet back from crosswalks to improve driver and pedestrian visibility.

T-5g



Pedestrian pathways and multi-use trails. Pedestrian pathways or multi-use trails for the exclusive use of non-motorized transportation modes should be provided. Pathways may be long facilities located along corridors or short facilities providing direct access through development projects or connecting areas not directly accessible by streets. Pathways should be planned to serve both recreational and commuter needs. The following shall apply to pedestrian pathways or multi-use trails:

1. Easement dedication. Dedication of easements for pathways through new private developments may be required.
2. Cooperation with local and regional agencies and jurisdictions. The City shall cooperate with other agencies to establish and maintain off-street pathways and trails utilizing creek, utility, and railroad right of way.
3. Foster Avenue Extension. Multi-use paths or trails shall be included in the Foster Avenue extension to Sunset Avenue.
4. Other Locations. Other potential locations for multi-use paths are within the North Coast Railroad right of way from Giuntoli Lane to Samoa Boulevard, along the west side of Samoa Boulevard/Old Arcata Road east of State Route 101, and along the perimeter of Arcata Bay towards Manila.

T-5h

Sidewalks. A continuous and interconnected system of sidewalks shall be provided throughout the City. The existing standard right of way of most arterials, collectors, and local streets (fifty feet) permits a five-foot sidewalk in each direction, the minimum width to comply with Americans with Disabilities Act (ADA) requirements. Some commercial areas in downtown Arcata should have wider sidewalks to accommodate higher levels of pedestrian traffic and window-shopping. The following standards shall apply to sidewalks:

1. Sidewalk continuity. Gaps in existing sidewalks should be closed to provide a continuous pathway. Cul-de-sacs should be discouraged because they disrupt pedestrian connectivity.
2. Sidewalk widths. New development projects shall be required to construct or reconstruct sidewalks along the property frontage. Required widths for new or reconstructed sidewalks are shown in Table T-5.
3. Sidewalk Requirements. Where adequate width exists to maintain ADA

minimum clearance, sidewalk pedestrian amenities should be provided in the downtown commercial area. These include benches, bicycle parking, pedestrian-scale lighting, street trees, flower boxes, trash receptacles, drinking fountains, and awnings. Private development projects shall be required to include sidewalk improvements; other landowners are encouraged to provide improvements.

4. Sidewalk Maintenance. Sidewalk facilities shall be systematically inspected and maintained to clean and repair damaged surfaces and remove impediments such as poles, newspaper racks, and other paraphernalia that interfere with pedestrian flow.

TABLE T-5 SIDEWALK FUNCTIONAL WIDTH REQUIREMENTS

DESCRIPTION	WIDTH
Low density residential area for two-way pedestrian traffic	6 feet
Low intensity commercial area for two-way pedestrian traffic and window shopping	8 feet
Higher density commercial and residential area for two-way pedestrian traffic, window shopping, and street furniture allowance	10 feet
Minimum width of sidewalk at bus stop with bench on sidewalk, without a shelter	8 feet
Minimum width of sidewalk at bus stop with a shelter on sidewalk	12 feet
High intensity commercial area with high pedestrian traffic and a variety of outdoor sidewalk use such as shopping and dining	12 to 15 feet

POLICY T-6 PARKING SUPPLY AND PARKING MANAGEMENT

Objective. Provide an adequate supply of parking in perimeter lots downtown. Minimize the impacts of Humboldt State University parking into adjacent neighborhoods. Ensure that new development provides an adequate but not excessive supply of parking.

T-6a Downtown parking. The following shall apply to parking within the Plaza Area Commercial land use category:

1. Develop additional public parking lots. Municipal parking lots shall be provided in the perimeter of downtown to create an adequate parking supply to serve existing businesses, future development, and to replace on-street parking removed for pedestrian, bicycle, and landscaping improvements. One municipal lot is planned to complete the City's parking system, but additional parking lots may be provided if additional demand or opportunities arise.
2. In-lieu fee for on-site parking. Payment of a fee in-lieu of providing required parking spaces may be permitted in the Central Commercial District or for Landmark Historic Structures. Fees collected shall be used exclusively to fund municipal off-street parking lots or alternative travel mode facilities.
3. On-site parking standards. The City shall consider reducing the parking standards

applicable within the Plaza Area Commercial land use category. New development is encouraged to pay in-lieu fees rather than provide parking on-site within the immediate Plaza area. Any on-site parking in the downtown should be located to the rear or side of buildings.

- T-6b **Parking in neighborhoods impacted by Humboldt State University.** The City shall employ the following measures to reduce the impacts of HSU-related parking on the surrounding neighborhoods:
1. Management of on-street parking. Metered on-street parking shall continue to be provided along local streets in the neighborhoods south of Humboldt State University to prevent all-day parking by students.
 2. Preferential parking zones. The restrictive residential permit parking program shall be maintained for neighborhoods severely impacted by HSU to provide residents and their visitors more on-street parking and to discourage students from driving to campus.
 3. Other parking management approaches. Alternative parking management approaches shall be considered if the student population and parking demand increases. Alternative approaches include time limit parking without meters, increasing no-parking zones to decrease supply of spaces, and implementing a strictly enforced tow-away policy. The City encourages Humboldt State University to reduce parking impacts on the City.
- T-6c **Parking standards for new development.** The City's parking standards shall be revised to specify a maximum parking ratio as well as a minimum parking ratio for new development. Parking lots should be located, where feasible, to the rear or side of commercial and multi-family residential buildings.
- T-6d **Shared or joint-use parking for commercial development.** A 25% reduction in the individual use parking requirements may be allowed where two or more non-residential uses provide joint parking. Developers of projects with appropriate land uses for effective shared parking are encouraged to provide joint parking facilities. Examples of compatible land uses include office buildings and any use that generates primarily an evening parking demand such as restaurants and theaters. The Urban Land Institute (ULI) Shared Parking manual shall be used to establish criteria for the parking generation characteristics of land uses.

POLICY T-7 RAIL AND FREIGHT TRANSPORTATION

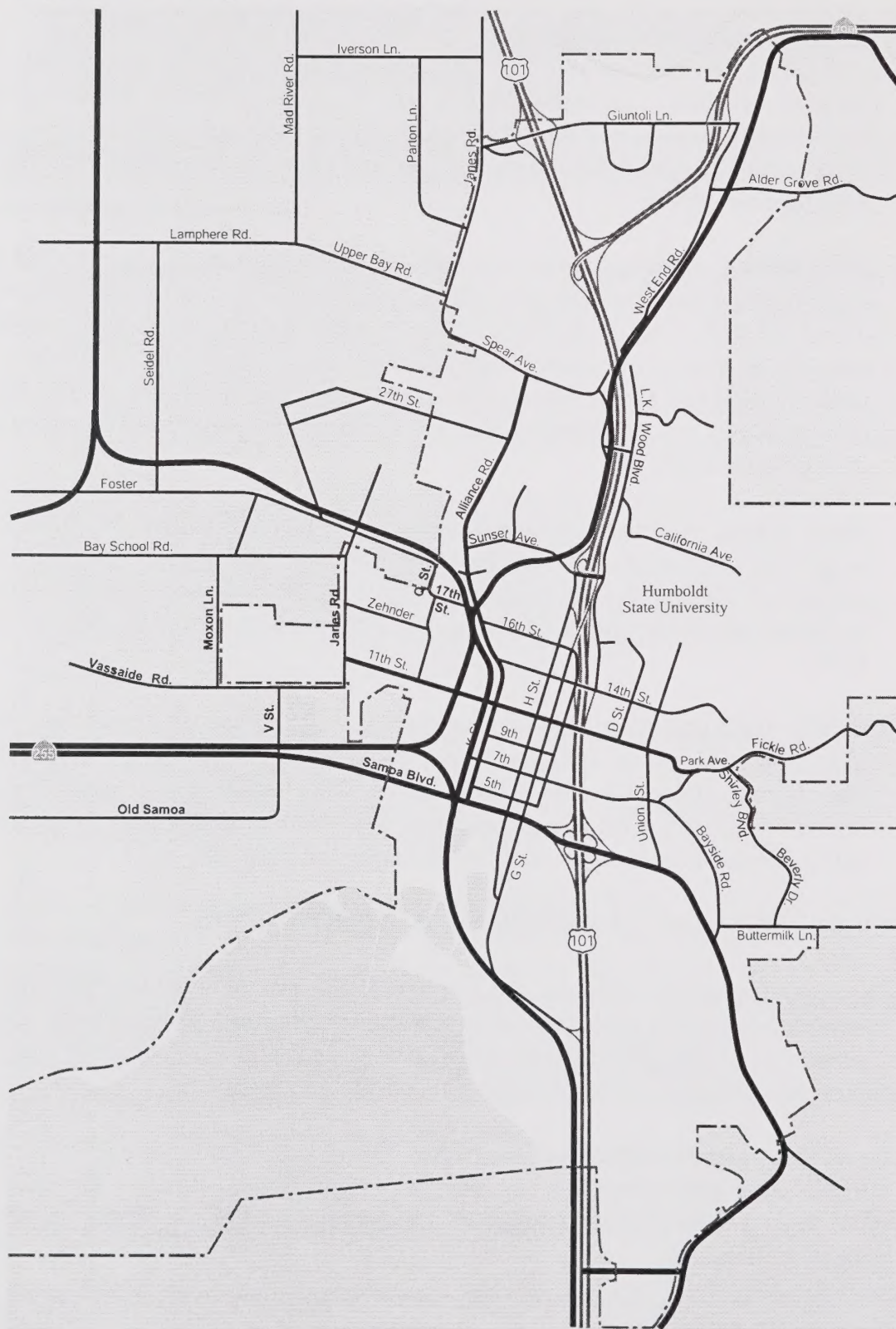
Objective. Provide a transportation system which adequately serves the freight shipment needs of the City's industrial and commercial uses. Recognize that freight transportation via truck or railroad is an essential element of the area's economic base.

-  **T-7a Retention of railroad right of way.** The North Coast Railroad Authority is encouraged to maintain railroad rights-of-way even if service is abandoned. The City may consider purchase of right of way should the Authority decide to sell. Railroad right of way may potentially be used for creation of multi-use trails. Long range potential uses of railroad right of way include an exclusive bus transitway or passenger rail service.
- T-7b Train service.** Existing or improved levels of freight train service to industrial uses is encouraged as demand increases. The City supports improvements to facilities and operations and increases in freight service as a necessity for maintaining a viable industrial economy. However, freight train service during the day, particularly in the peak morning and afternoon hours, is discouraged. The possibility of providing passenger train service between Arcata and Eureka using renovated historic trolleys should be considered.
- T-7c Truck routes.** The transportation system shall be planned to provide truck mobility to serve all commercial and industrial land uses in Arcata. Specific truck routes are designated in Figure T-f, although other highways, arterials, and collector streets may be designated in the future. The City shall actively enforce truck routes and speed limits.
-  **T-7d Rails to trails conversions.** The City supports plans to convert abandoned railroad rights-of-way to provide multi-use trails. Planning efforts shall be coordinated with federal, state, and regional agencies to obtain funds to purchase or lease abandoned lines if the railroad authority selects not to dedicate the right of way. If feasible, active railroad lines may be used for multi-use trail purposes.

POLICY T-8 FINANCING TRANSPORTATION IMPROVEMENTS

Objective. Ensure that adequate funding is available to implement transportation improvements required to adequately serve the amount of growth allowed by the land use plan. Ensure that private development provides on-site transportation improvements and contributes an appropriate share of funding for off-site improvements.

- T-8a Developer responsibilities and exactions.** Developers shall be required to construct transportation improvements along their property frontages. Where appropriate, a traffic impact study shall be required which identifies on-site and off-site impacts and mitigation measures.

Figure T - f Freight and Rail Routes

The developer shall be required to provide all necessary access and circulation facilities within the property and such facilities shall be designed to meet City standards. The following improvements may be required:

1. If development is located on an existing street:
 - a. dedication of right of way;
 - b. widening of street along property frontage to provide for a travel lane;
 - c. bicycle lane and parking lane;
 - d. reconstruction of curb, gutter and sidewalk;
 - e. transit facilities and landscaping within the right of way.
2. If development is located in a new growth area not served by streets:
 - a. dedication of right of way to construct a street to connect the project site to a public street;
 - b. construction of the street and connecting intersection(s) to City standards;
 - c. after the dedication is accepted, the City will maintain the street.
3. In all instances, the developer shall be responsible for mitigating any off-site traffic impacts of the proposed development in a manner consistent with the policies of this plan. Measures may include a reduction in the size or density of the development; installation of pedestrian, bicycle and transit amenities to encourage alternative travel modes; or implementation of Transportation Demand Management measures.

T-8b Subdivision improvements. All on-site transportation infrastructure shall be constructed using standards approved by the City. Developers are required to establish mechanisms, such as homeowners associations, to provide future maintenance of on-site streets and intersections that are not dedicated. The City may elect to require streets connecting to a public street to be dedicated to the City.

T-8c Traffic impact fees. The City may adopt a citywide traffic impact fee in accordance with the requirements of AB 1600 to fund transportation improvements to mitigate the traffic impacts of new development. The traffic impact fee may substitute in whole or in part for the off-site mitigation requirements described in Policy T-8a, but would be in addition to the developer's responsibility for on-site and frontage improvements. The traffic impact fee may be used to fund roadway extensions, intersection improvements, safety improvements, transit facility improvements, and pedestrian and bicycle facilities or amenities.

T-8d Transit finance. A&MRTS should continue to fund capital and operating expenses through fare box revenue, Humboldt State University subsidies, and state and federal subsidies. The City will explore the possibility of new development contributing a one-time fee towards A&MRTS capital expenses through the citywide traffic mitigation fee ordinance.

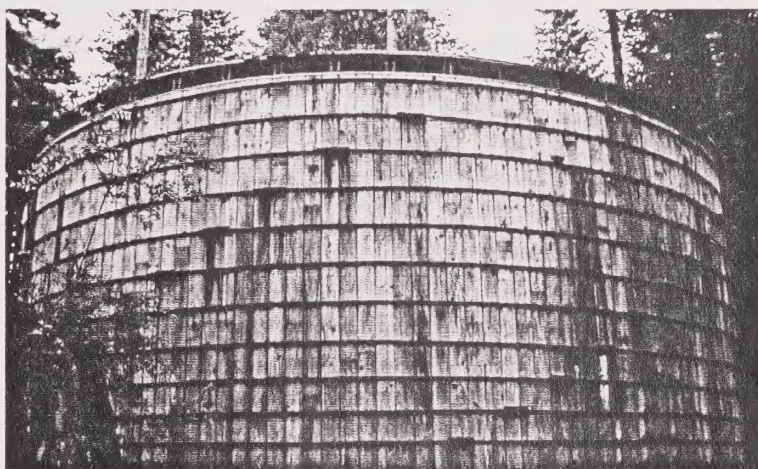
2.9 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
LU-1	Amend LUC to Incorporate Street Standards Add Street Standards to City's LUC (formerly LUDG)	Community Devel. Dept.	Year 1
T-1	Create Neighborhood Traffic Management Program Prepare and adopt a two-phase traffic management program. Phase 1 will involve education and community-driven measures, including developing a handbook describing procedures for residents to initiate a local NTMP. At a minimum, the handbook should define the procedures for initiation, types of data to be collected, a toolbox of measures, a method for establishing priorities, and potential funding mechanisms. Phase 2 will involve installing traffic calming devices in appropriate circumstances.	Public Works Dept.	Year 1
T-2	Pavement Management Program A pavement management program will evaluate roadway conditions, and schedule and complete needed maintenance and repair in a timely manner.	Public Works Dept.	Ongoing
T-3	Capital Improvements Program (CIP) Include transportation improvements, including bicycle and pedestrian facilities, in the City's CIP	Public Works Dept.	Annually
T-4	Adoption of Traffic Mitigation Fee Ordinance Adopt a citywide traffic impact fee in accordance with AB 1600 to mitigate the traffic impacts.	Public Works Dept.	Year 1
T-5	Develop Additional Public Parking Lot on West Side of Downtown	Community Devel. Dept.	Year 2
T-6	Develop Comprehensive Pedestrian Plan and Priorities Seek sidewalk improvement program funding.	Public Works Dept.	Ongoing
T-7	Bicycle Boulevards Provide primary bicycle corridors between major activity centers. Clearly sign all bicycle boulevards and include traffic calming measures to discourage automobiles.	Public Works Dept.	Year 1
T-8	Foster Avenue Connection Secure funding for the Foster Avenue connection, including bicycle paths.	Public Works Dept.	Year 3

PUBLIC FACILITIES & INFRASTRUCTURE ELEMENT

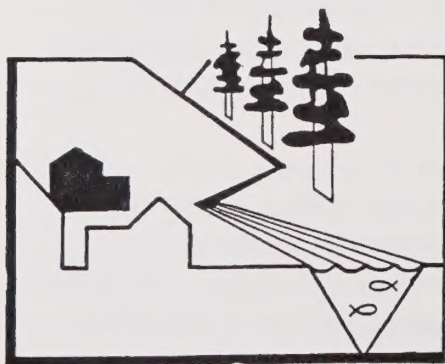
2.10 INTRODUCTION

Overview of Arcata's Water Supply and Delivery System. Community water systems divert free-flowing and subsurface water sources for domestic use. The City of Arcata recognizes that water and other natural resources are vital to the community, but also must be conserved. The City provides economic incentives and educational materials for water conservation, and also integrates water reclamation and wastewater treatment at the Arcata Marsh and Wildlife Sanctuary.



The City of Arcata uses a system of trunk lines and mains, above ground water tanks, and booster pumps to deliver domestic water to residents, businesses, industry, and other facilities within the City's Urban Services Boundary. The City water supply, drawn from wells located in the bed of the Mad River, is provided by the Humboldt Bay Water District which pumps, treats, and sells the water to the City. The City's Urban Water Management Plan defines water sources, conservation measures, usage, projections and shortage contingencies. In addition to the existing Mad River water source, the Management Plan also identifies a moderately deep groundwater aquifer in the north Arcata area as an additional water source. The City's Water Master Plan addresses the function and capacity of the water system, including equipment efficiency and life expectancy, water storage, pumping, storage, and fire flows.

Overview of Arcata's Stormwater and Wastewater Collection and Treatment Systems.



Arcata's best known public facility is the Arcata Marsh and Wildlife Sanctuary (AMWS) where municipal wastewater is treated and re-used for wetlands, ponds, and related wildlife habitat. The AMWS complies with California State Water Quality Board and California Coastal Zone Wetlands Enhancement Program policies and standards. But more importantly, the AMWS employs natural systems to successfully treat and reuse wastewater that most other communities dump or export. Treated wastewater flows through five marshes in the 170-acre sanctuary, where

natural organisms filter the water before it is released into Arcata Bay. The resulting nutrient-laden water and habitat attracts more than 200 species of birds, as well as other species. The City has a Wastewater Treatment Plant Master Plan to guide plant operations.

The City also manages a stormwater drainage system, and has a Drainage Master Plan to guide management practices. The Plan includes a hydrological analysis, drainage management alternatives, a capital improvement program, needs-assessment and financial summary, and a recommended operational plan. The Plan's objectives are: to identify and quantify the existing stormwater and drainage system, including channels, wetlands, creeks, culverts and pipes; to determine the available capacity of the system; and to identify design, maintenance, and repair alternatives to improve the capability of the system.

DRAINAGE MASTER PLAN MANAGEMENT GOALS

- Minimize increases in the volume and the flow of stormwater runoff associated with new development so as to minimize an increase in the hazards and the costs associated with flooding.
- Minimize the erosion potential from a development or construction site so as to prevent deposition of sediment into streams and other receiving water bodies.
- Maintain the integrity of stream hydrology by preventing stream channel erosion so as to sustain the hydrologic functions of streams.
- Reduce the pollutant load in stormwater runoff from developing and urbanizing areas so as to preserve the natural biological functions of streams and other receiving water bodies (and flood management and stream habitat quality)
- To the extent practical, acquire easements and properties necessary for effective drainage management.

Overview of Arcata's Educational and Public Facilities. The educational opportunities available in Arcata include public and private schools for kindergarten through twelfth grades, vocational training programs, and Humboldt State University. These facilities have been integrated into the community and represent an important facet of Arcata's identity as a place to live, work, and learn.

There are three public school districts (Pacific Union, Arcata, and Jacoby Creek Elementary School Districts) and several private schools that provide kindergarten through eighth grade education. High school education is provided by the Northern Humboldt Union High School District, which also serves the community of McKinleyville to the north. The College of the Redwoods Community College, located approximately fifteen miles south of Arcata, offers occupational, transfer and Associate degree programs.

Humboldt State University, the northernmost of California State University's system of twenty campuses, offers undergraduate and graduate degrees in more than fifty subject areas. The University also offers cultural activities, music, art, theater and athletic events that are open to the community. The University's Master Plan includes a maximum enrollment limit of 8,500 full time equivalent students.

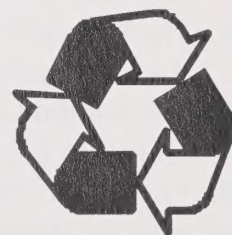
Public facilities offer locations for community interaction and events, ranging from community-wide celebrations to group meetings, instructional classes, and weddings. The City has enclosed spaces such as the Community Pool, Community Center, City Hall, schools, and places of worship. The City also has twenty-four separate parks including Redwood Park, the Marsh and its interpretive center and the Arcata Ballpark. Collectively, they provide gathering places for all manner of social, cultural, political, recreational, religious, educational, and entertainment events. Their physical form and design are also important in representing recognizable features that strengthen community identity. Arcatans have come to recognize that their public facilities are important components of community character.

Arcata Community Pool



Overview of Arcata's integrated waste management program. Arcata residents have a long-standing tradition of active commitment to resource conservation. Being far from the production centers of consumer goods, local native peoples and the City's early settlers were resourceful and "made do" with what they had. The civic and church-led drives for scrap metal and newspapers during WWI and WWII, and the youth and volunteer drives of the 1950 and 1960 set the stage for the citizen recycling activism following Earth Day 1970.

Since 1990, the City's role in source reduction, recycling and composting components of integrated waste management has shifted from facilitative to managing contracts for collection and processing of recyclable materials, composting organic debris from the City's operations, and direct performance of public education responsibilities. In 1989, the State of California passed Assembly Bill 939, requiring every city and county in the State to develop an integrated waste management planning document called a Source Reduction and Recycling Element (SRRE). AB939 and its accompanying regulations specify the content for the City's SRRE and require that the SERE provide a detailed plan for achieving "landfill diversion" goals of 25% by 1995, and 50% by 2000. The plan includes a "Waste Generation Study," (WGS) which reports the composition and quantity of solid waste disposed and diverted from disposal by Arcata. It is from this study, and its baseline projections of solid waste generation, that the City of Arcata is accountable for 25% and 50% diversion targets.



Prior to AB939, municipal solid waste management focused on collection and landfilling. With the passage and implementation of AB939, California cities and counties are required to adopt the "Integrated Waste Management Hierarchy". Emphasizing the "highest and best use" of secondary resources, the IWM Hierarchy establishes the following priority order for dealing with discarded materials:

1. Waste Prevention or "source reduction"-systems to prevent waste at the source.
2. Recycling and Composting-systems for collecting, processing, and manufacturing with discarded materials. Organic material is composted for soil amendment.
3. Transformation-a term for incineration disposal.
4. Landfill Disposal.

**Reduce First
Reuse Second
Recycle Third**

The City of Arcata has been in the forefront of recycling and has the oldest community-owned recycling center in the State. The Arcata Source Reduction and Recycling Element has eight main components are:

1. The **Source Reduction Component** identifies programs to be implemented by the City to reduce the quantity of waste generated.
2. The **Recycling Component** defines programs to be implemented to increase the type and quantity of materials recycled.
3. The **Composting Component** identifies programs to be implemented to increase the composting of organic wastes.
4. The **Special Waste Component** identifies wastes requiring special handling and disposal, and programs to manage special wastes which cannot be handled at current or future permitted disposal facilities.
5. The **Education and Public Information Component** describes educational and informational programs to be implemented to educate and increase public participation in the adopted Source Reduction and Recycling Element's programs.
6. The **Disposal Facility Capacity Component** identifies disposal capacity needed to meet the community's needs for fifteen years.
7. The **Funding Component** identifies costs and funding for the City's Source Reduction and Recycling Element plan implementation and how the City will fund those programs.
8. The **Integration Component** demonstrates that the programs to be implemented are sufficient to achieve a 25% diversion rate by 1995 and a 50% rate by the year 2000.

(Note: The Arcata Source Reduction and Recycling Element is not part of the General Plan.)

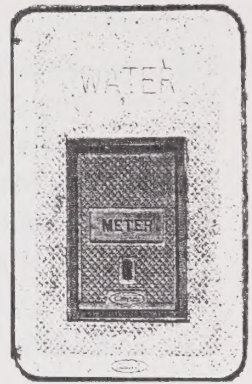
Each of these components includes the following integrated waste management goals:

ARCATA INTEGRATED WASTE MANAGEMENT GOALS:

1. Reduce the quantity of waste generated.
2. Educate Arcata residents to reduce, re-use, repair, compost, and recycle.
3. Maximize public involvement.
4. Minimize negative environmental impacts of solid waste management.
5. Increase economic incentives for source reduction, re-use, repair, composting, and recycling.
6. Improve measurement and standardize accounting of source reduction, re-use, composting, recycling, waste hauling, and disposal activities to increase knowledge and create a database for long term use.
7. Integrate source reduction, re-use, repair, composting, and recycling programs into all City activities.

Guiding Principles and Goals.

- A. Provide an adequate water supply and delivery system for day-to-day and emergency needs.
- B. Maintain the Arcata Marsh and Wildlife Sanctuary as an exemplary model of how natural systems can be effectively and efficiently used to treat and reclaim wastewater.
- C. Utilize natural systems and processes for managing stormwater.
- D. Promote lifelong learning by supporting educational facilities and programs at all levels.
- E. Recognize that public facilities are the primary gathering places for social, cultural, political, educational and entertainment events/celebrations, and that these facilities are important components of the community's identity.
- F. Publicly advocate reducing solid waste as the first priority for waste management; and promote recycling-based manufacturing through: City purchase of recycled products, education, and community support. Support new technology and education programs that reduce solid waste by an additional 10% every five years and maintain a long-term strategy for achieving "Zero Waste."



2.11 POLICIES

The Public Facilities and Infrastructure Element contains the following policies:

- PF-1 Water Supply and Delivery
- PF-2 Wastewater Collection, Treatment and Disposal
- PF-3 Stormwater Management
- PF-4 Educational Facilities
- PF-5 Community Facilities
- PF-6 Integrated Waste Management

POLICY PF1-1 WATER SUPPLY AND DELIVERY

Objective. Manage the City's potable water resources to ensure adequate quantities for community use, to promote water conservation, to maintain water quality, and not to deplete source supplies.

- PF-1a **Water supply.** Surface and subsurface water quantities that supply the City are dependent on rainfall and adequate upstream storage. The City shall continually monitor the water quantity and quality in its system and adhere to the Humboldt Bay Municipal Water District's rationing system to ensure that adequate supplies reach all users. The City shall also develop additional water sources to meet current peak use and future use demands.

PF-1b Capacity and management of City water delivery system.

The City shall update its Urban Water Management Plan, at least every five years, to maintain current projections, management, and contingency programs for water delivery. The Plan shall identify needed water delivery system improvements and anticipated extensions so that they can be budgeted for in the City's Capital Improvement Program. The City water system shall not be extended beyond the Urban Services Boundary (except as provided for in Policy GM-4b of the Growth Management Element).

The City shall update its Water Master Plan, at least every five years, to assess system efficiency and ensure that there is adequate storage capacity and fire flows to meet City needs.

PF-1c Water conservation.

The City shall use a combination of economic incentives, educational programs, and auditing to promote water conservation.

Water rates will continue to be

higher for consumption above baseline usage. Information about conservation devices such as flow restrictors, and practices such as off-peak irrigation, will be made available to the public. The City shall also implement water conservation measures through the water, wastewater, and drainage master plans, and through leak detection and inflow and infiltration (I/I) reduction programs.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT'S FIVE STAGE RATIONING SYSTEM

1. In effect at all times to assure best use of water in storage.
2. Goes into effect when the storage reservoir reaches between 60% and 55% of capacity, and Ruth Lake area rainfall is 70% or less of historical rainfall.
3. Goes into effect when Ruth Lake reaches 40% of capacity and rainfall is 60% or less of historical average. All wholesale and retail customers will be required to reduce usage by 10 to 15% over the previous two-year average.
4. Goes into effect when Ruth Lake reaches 30% of capacity and rainfall is 50% or less of historical average. All wholesale and retail customers will be required to reduce usage by 16 to 30% over the previous two-year average.
5. Goes into effect when Ruth Lake reaches 25% of capacity and rainfall continues at 50% or less of historical average. All wholesale and retail customers will be required to reduce usage up to 50% as may be determined by the rate of use of available supply and weather conditions.

PF-1d Water quality. The City shall perform periodic testing and, if necessary, treatment of its domestic water supply to ensure that it meets all state and federal safe drinking water standards, as required by the federal safe drinking water act.

POLICY PF-2 WASTEWATER COLLECTION, TREATMENT, & DISPOSAL

Objective. Collect and treat wastewater to achieve safe water quality standards, utilizing the City's internationally renowned marsh treatment facility.



PF-2a **Capacity and management of City wastewater collection system.** The wastewater collection system is designed to transport community sewage to the treatment plant.  The City shall update its Collection System Maintenance Program, at least every five years, to maintain current projections, management, and contingency programs for wastewater collection. The Plan shall identify needed collection system improvements and anticipated extensions, so that they can be budgeted for in the City's Capital Improvement Program. The City shall continue to monitor groundwater infiltration and surface water inflow (I/I) and take necessary action to ensure that these sources do not cause the collection system or the treatment plant to exceed capacity. The City wastewater collection system shall not be extended beyond the Urban Services Boundary except as provided in Policy GM-4b.

PF-2b **Arcata Marsh wastewater treatment system.** The City shall update its Wastewater Treatment Plant Master Plan, at least every five years, to evaluate the entire system; reflect any changes in treatment standards; ensure wastewater treatment is meeting current standards; verify that there is adequate treatment system capacity; and assure adequate water flows to maintain habitat.

The City shall maintain the existing facilities of the Arcata Marsh and Wildlife Sanctuary and construct new facilities consistent with the Marsh Enhancement Plan adopted by the City Council.



PF-2c **Compliance with California Regional Water Quality Control Board wastewater treatment and discharge standards.** The City shall regularly test its wastewater and make necessary adjustments in treatment levels, to ensure that it meets California Regional Water Quality Control Board standards. The City shall also keep its National Pollution Discharge Elimination System Permit (NPDES) current and in compliance with U.S. Environmental Protection Agency standards.

PF-2d **Composting and disposal of sludge and other system byproducts.** The City includes sewage sludge in compost processed at the treatment plant. The City uses this composted material as a soil amendment. The City shall continue this practice as an efficient means of recycling treatment plant by-products and shall investigate the possibility of selling excess compost to generate revenue.

PF-2e **Treatment of wastewater from other communities.** The City, until 2012, accepts for treatment wastewater from the unincorporated community of Fieldbrook. This practice may continue as long as there is adequate treatment system capacity. The City shall not enter into any new agreements for processing wastewater from other communities.



PF-2f **Maintain the Joint City/ Humboldt State University Wastewater Utilization Program.** Humboldt State University faculty and students were instrumental in the



design, testing, and development of the Arcata Marsh and Wildlife Sanctuary. The City and the University jointly participate in a wastewater utilization program, which provides ongoing research projects for students studying wastewater, stormwater, and water quality issues. The City and University maintain a five-year agreement to operate the program, with the City providing the funding and the University providing the student research and faculty advisors. The City shall renew the program with the University when the current agreement ends, as long as there are funds available to compensate the University.

POLICY PF-3 STORMWATER MANAGEMENT

Objective. Implement the City's drainage master plan to utilize natural drainage systems; minimize increases in stormwater runoff, flooding, and erosion; maintain the integrity of stream hydrology; reduce pollutant loads; and acquire easements and properties for effective drainage management.



PF-3a Utilization of City streams and watercourses as natural drainage



systems. Arcata's network of creeks provide a natural drainage system, however, they are very susceptible to damage from urban pollutants carried by runoff, and from drainage facilities that alter creek flows and natural functions. The City shall utilize creeks for urban drainage only when the basic natural functions will not be degraded.

PF-3b Control of stormwater runoff, flooding, and erosion. Stormwater runoff, especially at peak flows, can cause significant flooding and erosion if adequate precautions have not been taken. As stated in the Drainage Master Plan, the City shall manage the storm and surface water system in Arcata to maintain a hydrologic balance in order to protect water quality, prevent property damage, provide for the safety and enjoyment of citizens, and preserve and enhance habitat and sensitive areas.



PF-3c Stormwater quality. Enforce surface water controls, facilities such as detention basins and natural infiltration areas, and education programs to protect surface and ground-water quality.



PF-3d City drainage system. The City shall take a comprehensive approach to drainage system management in order to effectively control the quantity of stormwater runoff, assure water quality, and reduce potential flood damage from peak flows. As stated in the City Drainage Master Plan, the City shall gradually expand the City managed drainage system to:



1. Continue maintenance of all drainage facilities within public right-of-way, regardless of size.
2. Extend responsibility onto private property only when permanent easements are dedicated or otherwise available from the private property owner, and need is established based on technical criteria.
3. Define service limits upstream of the City as the point at which runoff from a publicly (not county) dedicated street enters the drainage system, or when a drainage feature needs repairs/improvements which have public benefits that exceed the cost of said repairs/improvements.

PF-3e **Easements and properties for drainage management.** The City shall secure the easements and properties necessary to complete and maintain the drainage system identified in the Drainage Master Plan.

POLICY PF-4 EDUCATIONAL FACILITIES

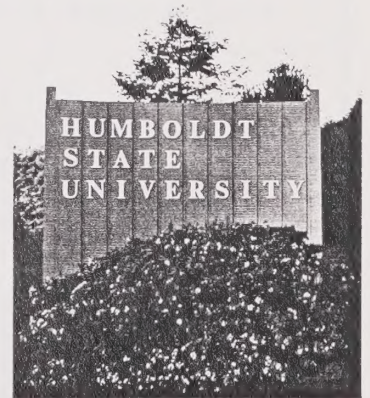
Objective. Identify student enrollment increases, based on the projected future population of the City, and coordinate with local school (public and private) districts, Humboldt State University, and other education providers to maintain and improve educational facilities and services, while preserving established community/student ratios.



PF-4a **Coordination with Arcata, Pacific Union, and Jacoby Creek school districts.** The City shall provide demographic information to assist the School Districts in projecting future student enrollments. The City shall encourage the school districts to expand existing schools rather than designating new sites for this purpose.

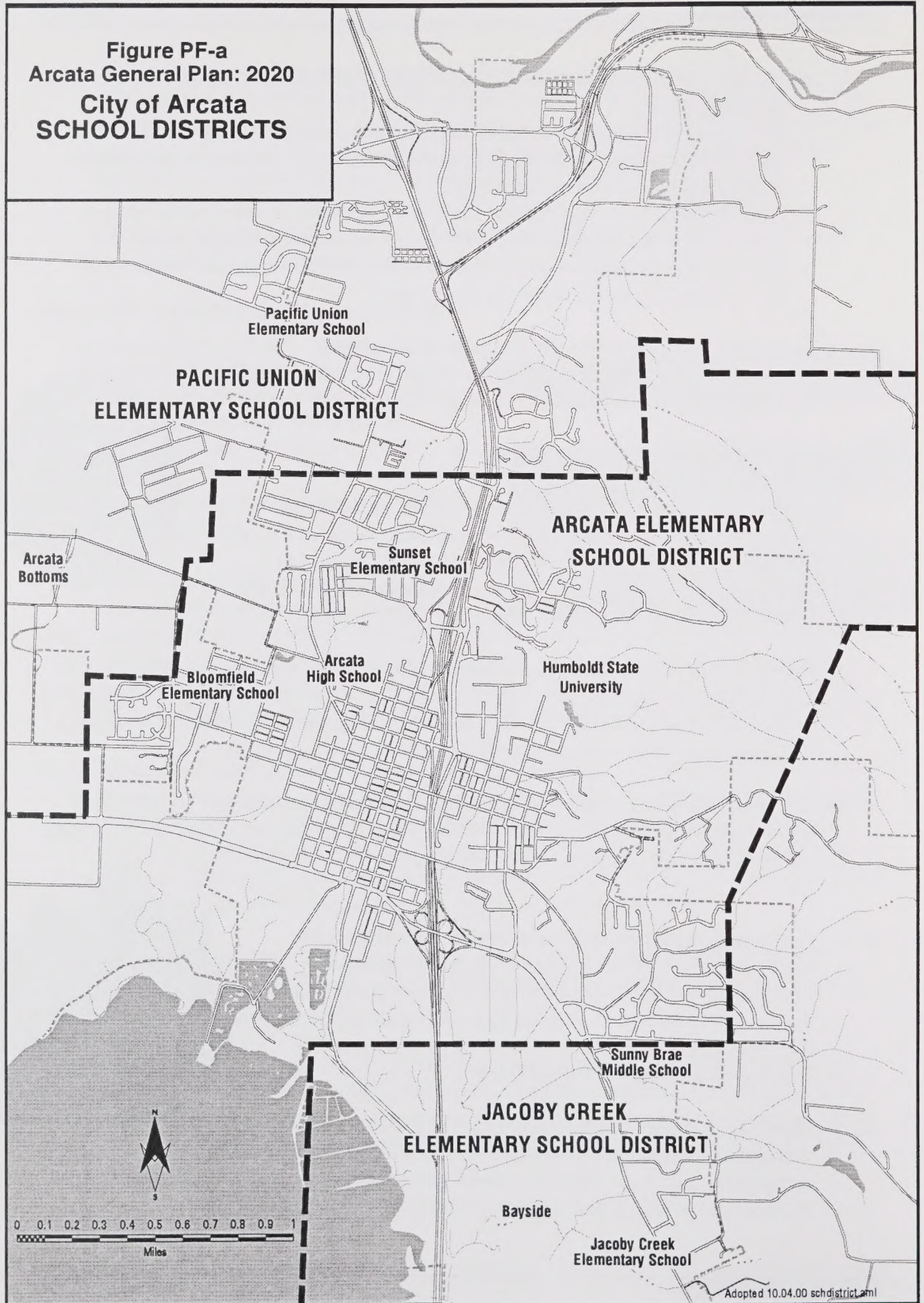
PF-4b **Coordination with private and specialized education providers.** The City shall accommodate providers of private, vocational, and specialized education that fills an identified community need, when they desire to locate in the City.

PF-4c **Coordination and development review with Humboldt State University.** The City shall designate at least one member of the City Council and one Planning Commission member as liaisons to Humboldt State University and request that the designated Council member be appointed to the University President's Advisory Council.



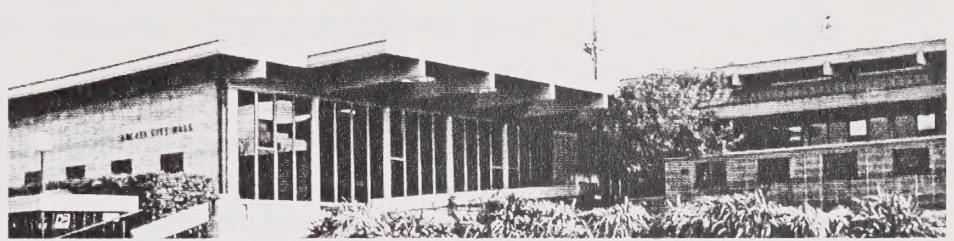
PF-4d **Joint use of school facilities for community events and recreation.** School facilities are primary locations for neighborhood level events and recreational activities. The City, school districts, and community organizations shall develop and maintain partnerships for the joint use of school facilities.

**Figure PF-a
Arcata General Plan: 2020
City of Arcata
SCHOOL DISTRICTS**



POLICY PF-5 PUBLIC FACILITIES

Objective. Provide adequate facilities for services and programs administered by the City and other public service providers, including City administrative and meeting facilities (City Hall), police and fire departments, libraries, and community centers.



PF-5a Facilities for community service and private organizations. Community service organizations, as well as non-profit and private organizations offer shelter, assistance, training and other human services. These organizations also offer places for religious, cultural, social, entertainment and recreation activities. The City shall allow facilities, operated by community service and private organizations, to be located in incorporated areas designated General Commercial [C-G]; Central Commercial [C-C]; Residential High Density [RH]; Limited Industrial [I-L]; and Public Facility [P-F]. Operations and functions of these facilities may be subject to a use permit, to be granted and revocable at the discretion of the City.

PF-5b City administrative and operations facilities and community centers. The City shall limit development of the Corporation Yard facilities to within existing boundaries, and shall maintain a landscaped screen along the northern and eastern perimeter of the oxidation pond.

PF-5c Public libraries and civic facilities operated by other agencies. The City shall coordinate with Humboldt County to provide public library facilities in the City. The City shall also coordinate with other agencies, such as the Redwood Regional Transit System, to maintain joint-use facilities in the City.

PF-5d Telecommunications facilities. Telecommunication towers, commercial dishes and antenna, monopoles, and other transmitting and receiving facilities shall be co-located (grouped together) to minimize the number of facilities and shall be screened to reduce impacts. Placement of commercial (serving more than a single user) telecommunication facilities shall be limited to lands designated Public Facility [P-F], Industrial [I-L & I-G], and Commercial [C-G, C-C, & C-VS], with a use permit.

Cellular, broadcast, and receiving towers shall not exceed ten feet in height, unless it can be demonstrated that additional height (up to thirty feet) would not create adverse visual or safety impacts. These facilities shall be screened from view and associated equipment rooms and switching devices shall be designed and landscaped

to blend with their surroundings. In approving a use permit, findings must be made that the proposed location is the most appropriate for the neighborhood, that the facility is of the minimum size necessary for the intended use, and that it is set back and screened to reduce visual and safety impacts. Any proposed city construction projects involving trenching shall be reviewed for opportunities to extend high speed networking infrastructure.

PF-5e **Maintenance of City streets and right-of-ways.** The City's streets and right-of-ways shall be adequately maintained for public use. Utilities within rights-of-way shall be placed underground, when feasible, to reduce obstructions such as poles and above-grade utility boxes on sidewalks. Pavement and landscape management programs shall be periodically reviewed and prioritized.

POLICY PF-6 INTEGRATED WASTE MANAGEMENT

Objective. Reduce solid waste generation at the source; maximize re-use and repair of appropriate items and material; promote composting and recycling; and properly transport non-recyclable solid waste to approved disposal sites.

PF-6a **Source reduction.** Source reduction and materials re-use are the most cost effective ways to minimize solid waste. Source reduction, or waste prevention, reduces the growing costs of collection, recycling, and disposal systems. Source reduction and re-use shall be promoted through educational programs and incentives. Examples of effective source reduction and re-use activities that shall be promoted are:

1. Backyard composting, landscaping with low water needs, and grass mulching.
2. Purchasing durable re-usable goods instead of disposable items (e.g., cloth diapers, rechargeable batteries).
3. Repairing equipment and appliances.
4. Purchasing goods from second-hand stores, flea-markets and swap meets.
5. Reducing the use of packaging by buying in bulk or purchasing fresh food at farmers markets.
6. Electronic mail and forms, double-sided copying and re-use of scrap paper.
7. Reusable coffee cups and beverages provided in dispensers.
8. Termination of unwanted mail.
9. Incentives such as on-call garbage collection and differential solid waste fees shall be used to encourage source reduction.

The Source Reduction and Recycling Element shall be updated every five years and shall incorporate the most efficient and cost-effective source reduction programs.

PF-6b **Recycling.** The City's recycling program shall continue and expand, unless a more efficient and cost-effective method of collecting and reusing materials is identified.

The City shall continue to contract for recycling, collection, and processing, in order to help meet and exceed the State diversion goal. The following programs shall also be promoted:

1. Collection of commercial corrugated cardboard.
2. Collection of office paper.
3. City procurement policies and practices favoring reusable and recycled products.
4. Implementation of density bonuses for buildings designed to promote recycling.
5. The City's active involvement in the Humboldt County Recycling Market Development Zone.
6. Educate the public to "close the loop" and buy locally-made products with recycled content.
7. Recycling education that includes self-haul services for recyclable materials not collected curbside.
8. Encourage the development and expansion of recycling-based manufacturing.

After the year 2000, in order to minimize increases in solid waste volumes and maximize the amount of material returned to productive use, the City shall continue these programs with a target of reducing landfill volumes 10% every five years.

PF-6c **Collection, transport and disposal of non-recyclable solid waste.** The City shall continue to contract for solid waste collection, transport, and disposal. Solid waste collected for disposal shall be transported to an approved landfill, or other approved solid waste processing or disposal facility. The City will provide education materials about proper use and disposal of household hazardous waste, non-toxic alternatives to household hazardous waste, and recycling of materials (e.g., motor oil, anti-freeze, paint, batteries) in conjunction with recycling centers and local businesses.

2.12 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
PF -1	Water Master Plan Update the City Water Master Plan, at least every five years, to assess system efficiency and ensure there is adequate storage capacity and fire flow. The Master Plan will also include economic incentives, education programs, and monitoring measures to promote water conservation.	Environ-mental Services Department	Every five years starting in Year 2
PF -2	Wastewater Collection System Maintenance Program Update the City Wastewater Collection System Maintenance Program, at least every five years, to assess collection system capacity and condition, ensure there is adequate treatment and disposal capacity, and recommend improvements necessary to reduce groundwater infiltration and surface water inflow. The Master Plan will also include economic incentives, education programs, and monitoring measures to reduce wastewater generation.	Environ-mental Services Department	Every five years starting in Year 3
PF -3	Stormwater Management - Drainage Master Plan Update the City Drainage Master Plan, at least every five years, to implement current provisions for minimizing increases in stormwater runoff, maintaining the integrity of stream hydrology, and reducing pollutant loads. The Master Plan will also include economic incentives, education programs, and monitoring measures to promote on-site retention and reduce flooding and erosion impacts.	Environ-mental Services Department	Every five years starting in Year 1
PF -4	Source Reduction and Recycling Element Update the Source Reduction and Recycling Element (SRRE), every ten years, to implement the most current technology for reducing solid waste generation at the source, maximize re-use and repair of goods, promote composting and recycling, and properly transport non-recyclable solid waste to approved disposal sites. The SRRE will also include economic incentives, education programs, and monitoring measures to achieve the City's goal of reducing solid waste volume by an additional 10% every five years, and the overall long-term strategy for "zero-waste."	Environ-mental Services Department	Every ten years starting in Year 10
PF -5	Telecommunication Facilities Ordinance Prepare a Telecommunication Facilities Ordinance that implements policy PF-5d and specifies findings required for a use permit.	Community Development Dept.	Year 2
PF -6	Marsh Enhancement Plan. Update the Marsh Enhancement Plan to reflect the City's acquisition and addition of the Hunt Property.	Environ-mental Services	Year 3

Chapter 3

Housing and Parks & Recreation

**Housing Element
Parks & Recreation Element**



Chapter 2

History and

Development of the

Library System

1. Introduction to the

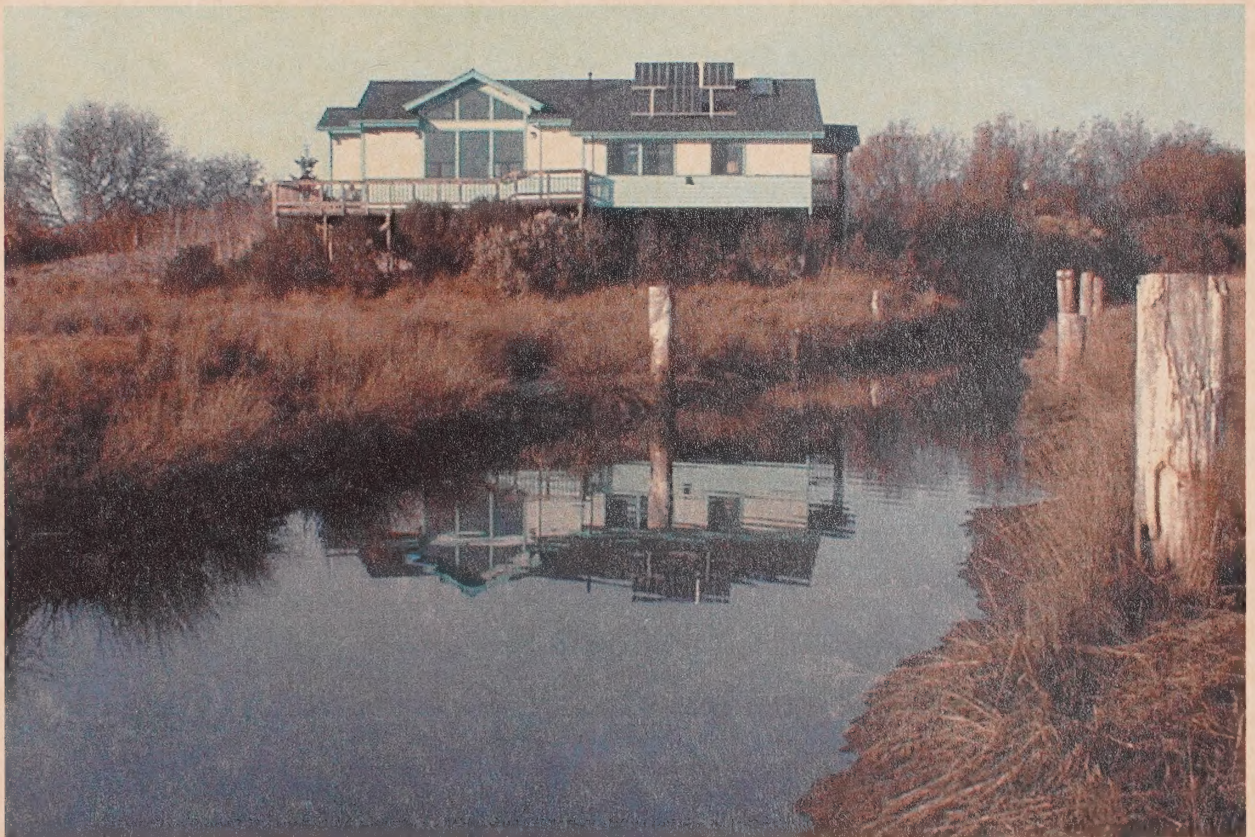
The history of the library system is a complex and multifaceted one, spanning centuries and continents. It is a story of the evolution of knowledge, the development of writing, and the creation of organized collections of books and documents. The roots of the library system can be traced back to ancient civilizations, where the first libraries were established as places of learning and research. These early libraries were often housed in temples, palaces, or public buildings, and they served as centers for the preservation and dissemination of knowledge. Over time, the library system has evolved and adapted to the needs of different societies and cultures. The invention of the printing press in the 15th century revolutionized the way books were produced and distributed, leading to the growth of public libraries and the establishment of library systems. The 19th and 20th centuries saw the rise of modern library science, which emphasized the systematic organization and management of library collections. Today, the library system continues to evolve, embracing new technologies and serving the needs of a diverse and global community. The history of the library system is a testament to the human desire for knowledge and the power of organized information.

The Housing Element (adopted January 6, 1993) and the Parks & Recreation Element (adopted November 16, 1994) are separately bound and are not part of this update.

Chapter 4

Environmental Quality and Management

Open Space Element
Resource Conservation and Management Element
Air Quality Element



Project 3 Environmental Quality and Assessment

Environmental Quality
and Assessment
Project 3

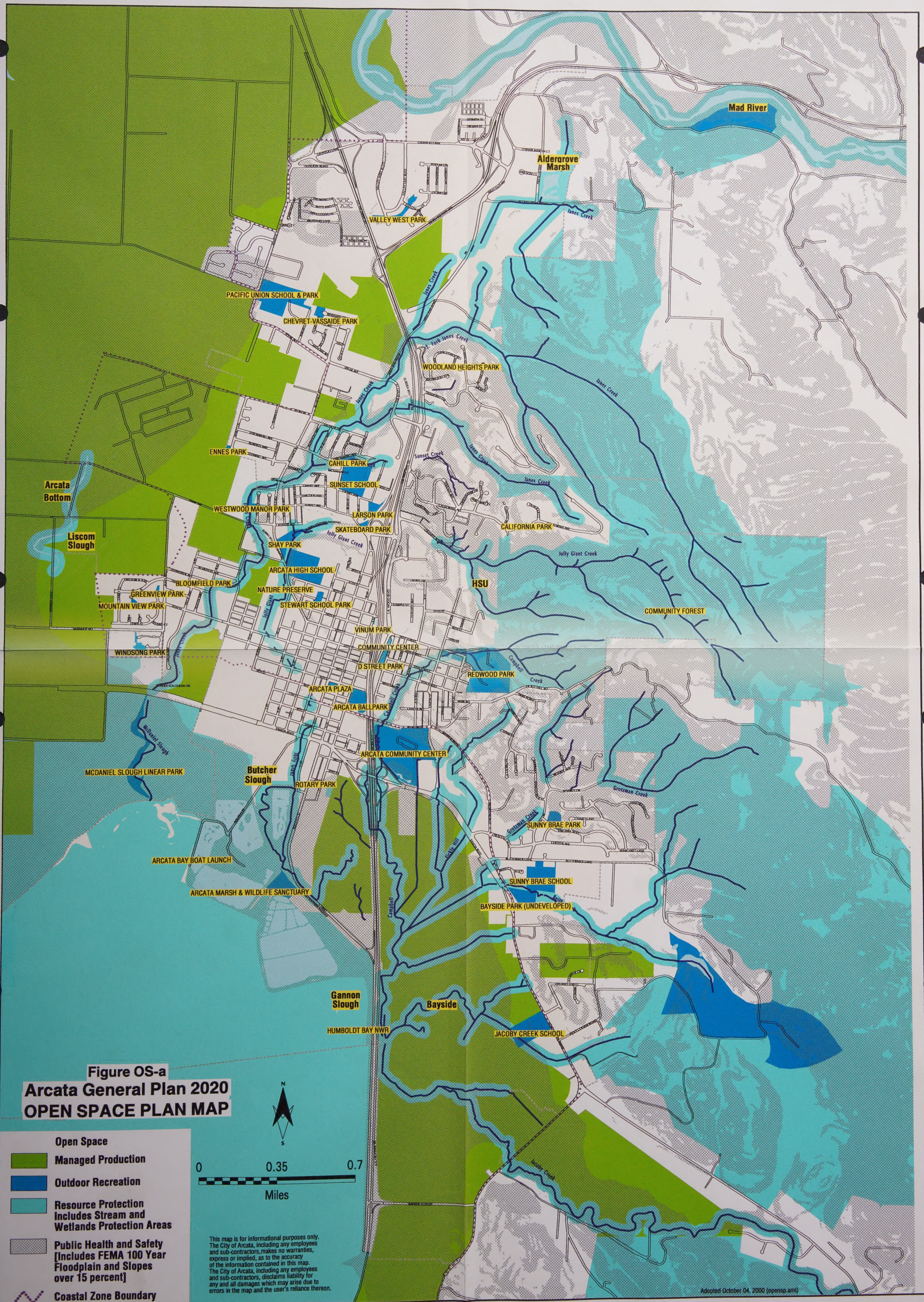
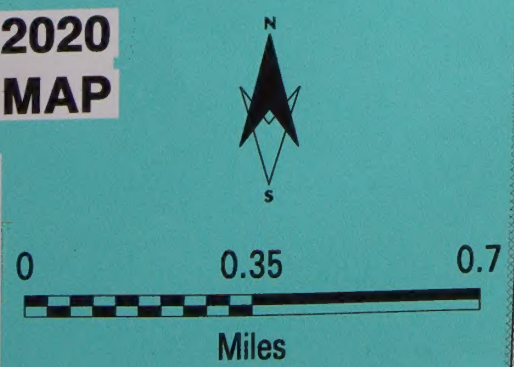


Figure OS-a
Arcata General Plan 2020
OPEN SPACE PLAN MAP

- Open Space
- Managed Production
- Outdoor Recreation
- Resource Protection
Includes Stream and
Wetlands Protection Areas
- Public Health and Safety
[Includes FEMA 100 Year
Floodplain and Slopes
over 15 percent]
- Coastal Zone Boundary



This map is for informational purposes only. The City of Arcata, including any employees and sub-contractors, makes no warranties, express or implied, as to the accuracy of the information contained in this map. The City of Arcata, including any employees and sub-contractors, disclaims liability for any and all damages which may arise due to errors in the map and the user's reliance thereon.

REDWOOD PARK

Creek

Grotzman Creek

SUNNY BRAE PARK

SUNNY BRAE SCHOOL

BAYSIDE PARK (UNDEVELOPED)

JACOBY CREEK SCHOOL

Jacoby Creek

OPEN SPACE ELEMENT

4.1 INTRODUCTION

Overview of Arcata's Open Space Resources. Arcata's open spaces take many forms and serve a variety of functions. Open space areas represent a significant and desirable component of the community's character and maintain natural, recreational, and visual resources for future community use and enjoyment. Open space is valuable for both passive and active uses. Designating or otherwise protecting lands as open space provides for: protection of natural habitats and species; managed production of natural resources such as agricultural and forest products; recreational uses; coastal access; scenic, aesthetic resources; and avoidance of development on such areas as steep slopes, faults, and flood zones that are potentially hazardous to the community. Open space is also valuable for preserving scenic views and other aesthetic considerations. The overall system is also enhanced when open space lands are linked by natural biological corridors, greenways, easements, and other types of connections. Open space categories are described in more detail below, and mapped on Figure OS-a located in the map pocket at the end of this chapter.

Open Space for the maintenance and enhancement of natural resources protects plant and animal habitat, especially in areas where rare, endangered, or threatened species exist. Arcata's creek watersheds and watercourses, McDaniel, Gannon, Butcher and Mad River sloughs, Arcata and Aldergrove Marshes, wetlands, baylands and tidelands, and ecological and scientific study areas, may also be included in this category.

Open space for the managed production of resources includes forest lands on the west slopes of Fickle Hill, agricultural lands in the Arcata Bottom and Bayside areas, aquaculture areas in Arcata Bay, and the aggregate deposits along the Mad River. These areas are important for their production of food, wood, and mineral products, as well as for maintaining water quality and other ecological functions.

Open space for outdoor recreation includes City parks and ballfields, such as Redwood Park and the Community Center; cultural and special use areas such as the Arcata Ball field, Skate park, and Plaza; neighborhood parks such as Sunny Brae and Stewart Parks; and natural areas such as the Arcata Marsh and Shay Park.



Open space for public health and safety includes earthquake fault zones, liquefaction areas, steeply sloped hillsides, and 100-year floodplains.

In many cases, open space can provide multiple benefits. Agricultural lands in the Arcata Bottom and forested lands on the western slopes of Fickle Hill are important for their natural and resource production capabilities. These lands also retain natural drainage systems, sustain natural habitats, enhance the community's viewshed and provide an aesthetic resource. Designating these and other open spaces in the General Plan documents their value to the community. It also allows City decision-makers to identify open space as an important resource when considering proposed changes in community form.



Within the city and surrounding Planning Area, natural resource lands that are part of the open space system include: ocean beach; sand dunes; back-dune woodlands; Arcata Bay; Mad River; Mad River Slough; and buffer strips along the Mad River, and Jacoby, Jolly Giant, Janes, Sunset, Grotzman, Beith, and Campbell Creeks.

The Open Space Element is closely linked with the Resource Conservation and Management, Public Safety, and Parks and Recreation Elements of the General Plan. These linked elements contain policies for the protection, management, enjoyment, and access to and appropriate use of identified open space areas. The Open Space Element identifies natural and productive resource areas, parks, coastal access, outdoor recreation, and hazard areas that should be considered for their open space values.

Guiding Principles and Goals.

- A. Protect open space lands with native biotic resources as a natural legacy for future generations.
- B. Protect and manage public trust lands to sustain plant and animal species and ecosystem health.
- C. Recognize that the value of natural resources lands of all sizes and shapes are significantly enhanced when linked together in an open space system.
- D. Designate as open space, resource lands capable of producing agricultural, forest, mineral, and aquaculture products; and manage those lands for sustained production as well as habitat, hydrological, mineral, recreational, and aesthetic values.
- E. Preserve sufficient lands, for both active and passive recreational activities, and coastal access to serve the present and future needs of the community.

General Plan Parks and Recreation Element Goals:

- To provide a wide spectrum of recreational opportunities for Arcata residents of all ages.
- To provide all residents with a wide assortment of parks and related facilities.
- To promote sharing of facilities and programs with other entities.
- To emphasize fiscal efficiency in the provision of parks and recreation programs.
- To provide aesthetically pleasing parks and recreational facilities which are compatible with their environment.
- To bring park and recreation facilities into compliance with changing federal and state laws, and encourage user safety.

- F. Protect lands that, due to instability or seismic risks, pose potential risk to human health and well-being.
- G. Provide additional entryways to the Community Forest to promote greater accessibility from Arcata's adjacent neighborhoods.

4.2 POLICIES

The Open Space Element includes the following policies:

- OS-1 Overall Open Space System
- OS-2 Natural resource Protection and Enhancement
- OS-3 Open Space for Managed Production of Resources
- OS-4 Open Space for Outdoor Recreation/Coastal Access
- OS-5 Open Space in Health and Safety Hazard Areas

POLICY OS-1 OVERALL OPEN SPACE SYSTEM

Objective. Designate, maintain, and enhance the quality, and increase the amount of permanently protected open space in the Arcata Planning Area, including: natural resource areas; resource production areas; outdoor recreation areas; and areas subject to health and safety hazards. These areas are to be protected, linked together in a network wherever practical for accessibility, managed for resource production, and maintained for enjoyment by City residents and visitors.

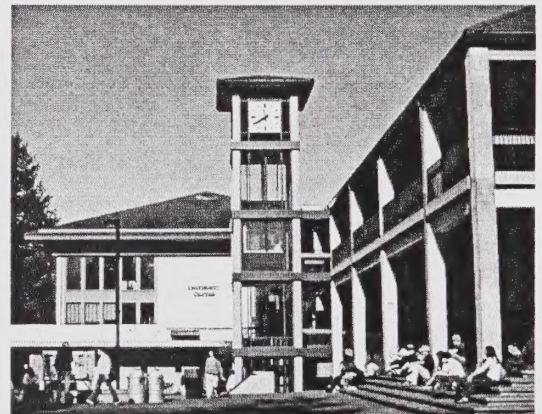
- OS-1a **Designation of open space lands with native biotic resources and ecosystems.** The native biotic resources of the forested western slopes of Fickle Hill, river and creek riparian zones, the Arcata and Aldergrove Marshes, and Arcata Bay tidelands and sloughs are unique ecosystems that have important habitat values in addition to their



other open space values. These areas as designated on Map OS-a shall be protected as open space for their resource values.

- OS-1b **Open Space Plan Map.** The areas designated as open space are shown on Figure OS-a. Generally, these lands are designated as A-E, NR, or PF on the land use map. Other lands, where identified open space resources have been preserved through easements or other means, are also subject to this element's policies.

- OS-1c Relationship to Resource Conservation and Management and Public Safety Elements.** This element identifies hazard areas that shall be maintained as open space for the benefit of the community. The policies of this element and policies found in the Public Safety Element provide common direction for the designation and avoidance of hazard areas. The natural open space features of these areas, such as vegetation, shall be retained, except where they contribute to instability or increase hazards.
- OS-1d Linkages between open space areas.** Linkage of open space lands, especially along biological corridors and greenways, is important for animal migration, non-motorized vehicle transportation, and community recreation, and shall be encouraged. Trails along levees or adjacent to railroad tracks and street rights-of-way can serve as links to parks, open space, and natural areas. Easements shall also be considered as a lower cost alternative to preserving links between open space.
- OS-1e Appropriate uses and development limitations within open space lands.** Certain open space areas contain wetlands and other critical habitat, and must be preserved in a natural condition and enhanced. Other areas can accommodate managed activities such as mining and timber harvesting, subject to sustainable yield policies RC-6 and RC-8 in the Resource Conservation & Management Element, while other areas shall be designated for interpretive and recreational use. Each designated open space area of the City shall be evaluated by the appropriate City advisory board (e.g., Creeks & Wetlands Committee) to determine the resources present, the acceptable level of use, and appropriate preservation. The management of, and development in, open space areas are subject to applicable policies of the Resource Conservation and Management and Land Use Elements.
- OS-1f Designation of lands with scenic, aesthetic, historic, and cultural value.** The City has scenic routes, including State Route 101 and Samoa Boulevard; vistas, including the forested slopes of Fickle Hill and the Arcata Bottoms; and areas of historic and cultural value, such as the Plaza. The open and natural characteristics of these areas shall be maintained. Policies for retaining scenic vistas and landscape features are included in the Community Design Element of the General Plan.
- OS-1g Public and private ownership and management of open space.** Open space resource areas are owned and managed by the City, state agencies, land trusts, corporations, and private individuals. The City shall set the standard for responsible resource land stewardship through its management of the Community Forest,



marshes, parks, and other resource lands, and encourage other public and private entities, entrusted with the ownership and management of similar resource areas, to consider natural resource values to the community in all long term use decisions.

- OS-1h **Greenbelts.** Preserving greenbelts of agricultural and other open space lands is an effective method of defining urban development limits. The City shall encourage the County to preserve agricultural designations in the City's Planning Area. The City also supports greenbelt preservation through land and conservation easement acquisition.

These measures will help preserve visual and associative links to nature, and reinforce the distinction between the City and adjacent communities.

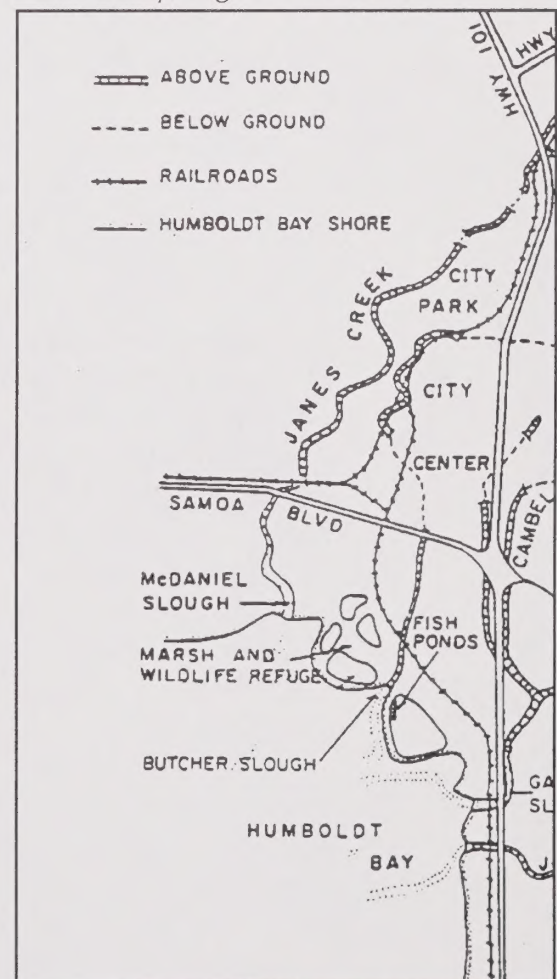
- OS-1i **Acquisition of open space areas.** There are several privately held land parcels, including forested property on the west slopes of Fickle Hill, which would contribute significantly to the City's open space system. The City shall pursue acquisition of these parcels, from willing sellers, for their open space values. Joint funding for land acquisition will be coordinated with County, regional and state agencies.

POLICY OS-2 NATURAL RESOURCES PROTECTION AND ENHANCEMENT

Objective. Designate, maintain, and enhance natural resource areas, including sensitive habitat areas, necessary to sustain plant and animal life and native biological diversity.

- OS-2a **Open space plan map designations for natural resource protection.** Publicly held lands containing creeks, wetlands, other open water, marsh, sensitive habitat, forests, and other important natural resources are designated on the Open Space Map.

- OS-2b **Development limitations and management for maintenance of biotic resources and diversity, including aquatic resources and sensitive habitats.** Creeks, marshes, and wetlands are significant components of Arcata's natural open space system. The City shall restore and maintain this system for the benefit of residents, visitors, fish, and wildlife.



The Arcata Bay and tidelands represent an important natural edge and open space feature of the City. Buildings, landform alterations, or access routes in this area shall be of a design and scale that preserves open space and natural characteristics and maintains public views to the Bay.

Local creeks which flow openly through the developed portion of the community shall have biological corridors and greenways established, and shall be maintained as visual assets to any developments which adjoin them.

The natural features of the Mad River corridor, Arcata's creeks and adjacent areas, marshes, and other wetland areas, shall be retained.

Unique vegetation and wildlife areas shall remain in a natural condition. Such areas include sand dunes and backdune woodlands, eel grass area, salt marshes, and special habitats (tern and osprey nesting areas, cormorant rookery, harbor seal area and egret roost). The policies of this element shall also call for protection for habitat of species that become threatened in the future.

POLICY OS-3 OPEN SPACE FOR MANAGED PRODUCTION OF RESOURCES

Objective. Designate and conserve resource areas, including forest and agricultural lands, fisheries and aquaculture, groundwater, and mineral resources, for their sustainable, long-term productive capabilities

OS-3a  **Designations for forest, agriculture, fisheries, aquaculture, groundwater, and mineral resource uses and management.** All publicly held lands, and some privately held lands adjacent to the Community Forest and east of Aldergrove Industrial Park, actively managed for production of forest, fisheries, aquaculture and mineral resources are designated as Natural Resource [NR] on the General Plan Land Use Element map. Productive agricultural lands are designated on the Open Space Map.

OS-3b **Development limitations and management for productive resource areas.** The policies of the Resource Conservation and Management Element shall be followed for the development and management of productive resource lands. This



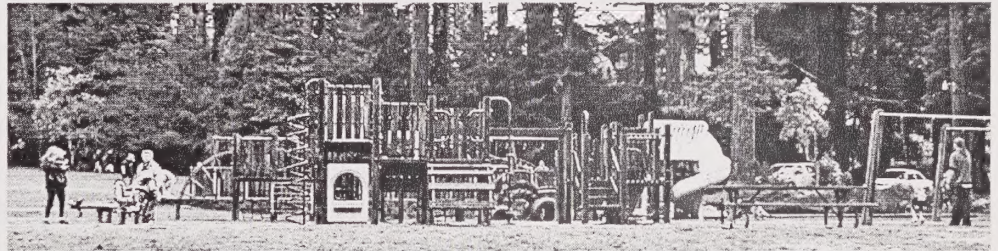
includes policies for: Natural Biological Diversity; Streams Management; Wetlands Management; Baylands and Tidelands; Agricultural and Forest Resources; and Water, Energy, Soils and Mineral Resources. The City shall require that management of open space resources be consistent with these and other applicable General Plan policies.

POLICY OS-4 OPEN SPACE FOR OUTDOOR RECREATION AND COASTAL ACCESS

Objective. Designate and secure public access to a sufficient supply of land and water areas with recreation resource value, including parks, forests, coastal areas, baylands, and stream corridors, to meet the outdoor recreation needs of Arcata residents and visitors.

OS-4a Designations for park lands and outdoor recreation areas. All publicly held park lands and outdoor recreation areas are designated as Public Facility [PF] on the General Plan Land Use Element map.

The natural resources present on these lands



are also subject to the applicable policies of the Resource Conservation & Management Element. Recreation areas are mapped on Figure OS-a.

OS-4b Coastal access policy. The City shall maintain coastal access corridors to Arcata Bay and other public use areas and public trust lands within the coastal zone.



Coastal access routes include:

1. Access from Samoa Boulevard to Arcata Bay via South "I" and "G" Streets.
2. Access to Mad River Beach via Mad River Road.
3. Access to Manila Dunes via Samoa Boulevard.

OS-4c Relationship to the Parks and Recreation Element. This element contains policies for management of open space lands designated for outdoor recreation. The Parks and Recreation Element contains goals and policy direction for: providing a range of recreation opportunities; sharing facilities; park and recreation program efficiency; environmental compatibility; and user safety.

POLICY OS-5 OPEN SPACE IN HEALTH AND SAFETY HAZARD AREAS

Objective. Designate health and safety hazard areas such as seismic fault and liquefaction zones, unstable soils or slopes, floodplains, areas susceptible to wildland fire, and watershed/reservoir safety zones. Provide appropriate protections, or restrictions, to

minimize unnecessary exposure of people and property to health and safety hazards.

- OS-5a **Designation of open space for public safety.** Designated open space for public safety is shown on Figure OS-a. Setbacks for seismic faults and liquefaction zones, unstable soils or steep slopes, mapped Flood Hazard Zone A, areas susceptible to wildland fire, and watershed/reservoir safety zones, shall be established as part of the development review process. Where severe safety considerations exist (e.g., within the Alquist-Priolo Zone), open space easements shall be granted to the City to protect people and property from health and safety hazards.

Open space areas, with slopes 15% or greater shall retain their natural landform features; excavation shall be restricted, according to the City's adopted grading ordinance, and removal of vegetation shall be limited to selected thinning of timber stands and removal of hazard trees.



Open Space areas that are flood-prone may be used for agricultural and recreational purposes but shall be kept free from urban development. A flood plain overlay zone shall be applied to all Natural Resource [NR] and Agricultural [AE] areas subject to inundation according to the Flood Insurance Rate Map (Flood Hazard Boundary Map) developed by the Federal Emergency Management Agency (FEMA) or the Federal Insurance Administration.

- OS-5b **Development limitations and management for health and safety hazard areas.** The policies of the Public Safety Element shall be followed for all development activity in areas with known or suspected safety hazards. In particular, seismic hazards, other geologic hazards, and flood hazards policy topics are applicable.



4.3 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURES	RESPONSIBLE PARTY	TIME FRAME
OS-1	Open Space Preservation Preserve existing and acquire additional open space lands identified in this element through the following measures: • Purchase of open space lands in fee. • Secure easements by negotiated agreement. • Maintain open space designations on City and County planning maps. An appointed Open Space Advisory Committee will be responsible for implementing the Open Space Element and making relevant recommendations to City Council, including possible funding through bond measure approval. The advisory body is to participate in the next County General Plan update and promote incorporation of the City's open space goals, policies, and implementation measures in the County community plans covering the Arcata Planning Area.	Community Development Dept./ Planning Commission	Year 1

RESOURCE CONSERVATION & MANAGEMENT ELEMENT

4.4 INTRODUCTION

Overview of Arcata's Natural Resources. Collectively, Arcata's natural resources constitute a significant component of the community. The forested hillsides, including the community forest, the Arcata Bottom, baylands, tidelands, creeks and wetlands are features of the natural ecosystem, which is as much a part of the community as homes, businesses, and schools. Goals and policies for conserving, enhancing, and managing the City's natural systems and features are critical ingredients of the General Plan.

Arcatans have demonstrated that natural resource conservation and management are civic responsibilities, which can be met by emphasizing resource enhancement rather than resource depletion. By taking an ecosystem management approach, the City can evaluate natural resource interrelationships, and plan to maintain regional biodiversity when making resource conservation and management decisions.

Biodiversity - "The variety of organisms considered at all levels, from genetic variants belonging to the same species through arrays of species to arrays of genera, families, and still higher taxonomic levels; includes the variety of ecosystems, which comprise both the communities of organisms within particular habitats, and the physical conditions under which they live."

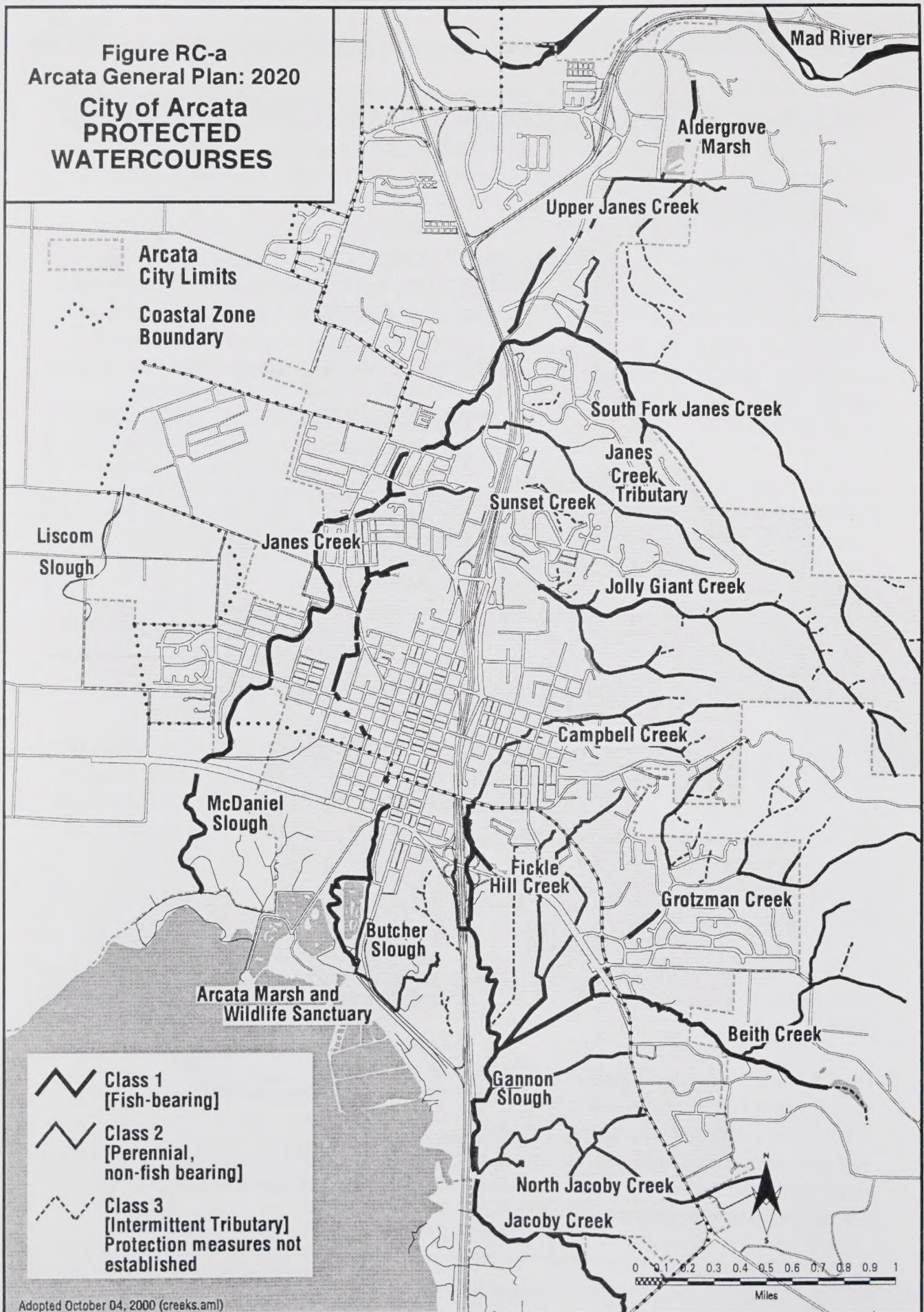
Edward O. Wilson
The Diversity of Life, 1992

Overview of Arcata's watercourses, wetlands, baylands and tidelands. Arcata's nine named creeks and associated sloughs provide: flood control, freshwater habitat, riparian habitat, scenic enjoyment, water quality, educational opportunities, public safety, fish and wildlife habitat (e.g., fish spawning and migration, wildlife nesting and foraging areas), open space, recreation, marine habitat, and groundwater recharge. These creeks also have tributaries with similar feature and functions. Arcata's creeks and sloughs, including areas with tidal action, are illustrated in Figure RC-a, on the following page.



The City has adopted a Creeks Management Plan (CMP) which contains policies for: creek zone and flood hazard management; erosion and sedimentation, vegetation and wildlife; water quality; recreation; and public awareness. The CMP was adopted to address land uses that have significantly altered Arcata's creeks from their original condition.

Figure RC-a
Arcata General Plan: 2020
City of Arcata
PROTECTED
WATERCOURSES



These alterations have resulted from the present use of stream courses as storm drains, and past land use practices which produced large amounts of sediment, contributing to creek degradation. Alterations also included structures such as tidegates, which prevent or severely limit access for anadromous fish to all but Jacoby and Jolly Giant creeks. Except for Jacoby Creek, the riparian forests have been completely removed from at least half of each stream channel. Pollutants from a variety of sources (including petroleum products from urban run-off and suspended sediments from soil erosion) degrade the appearance and the biological integrity of the creeks.

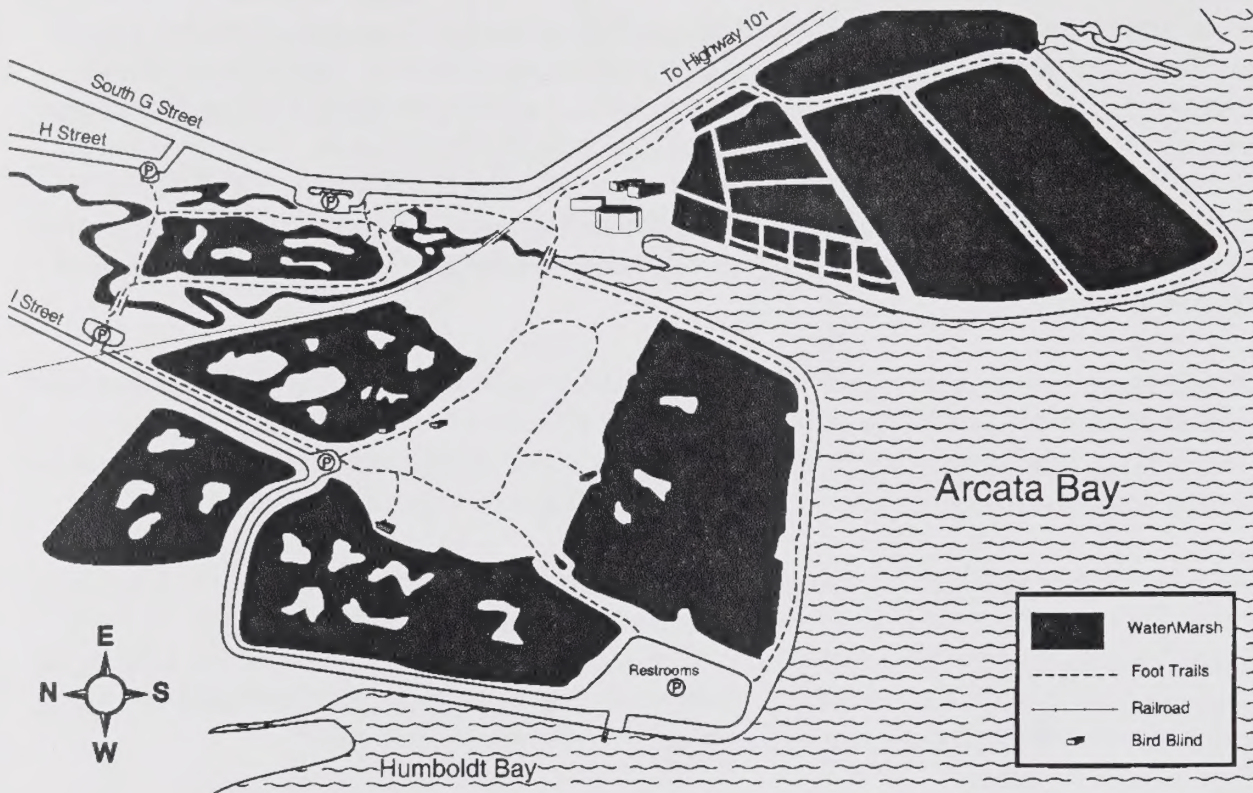
The Resource Conservation and Management Element contains overall goals and policies for creek management, which are supported by CMP policies and implementation measures. The CMP provides policy direction for new and modified development along creeks, and for existing activities in creek zones, in order to fully realize the creek's beneficial uses.

The westernmost reach of the Mad River forms the northern boundary of Arcata's Planning Area. The river originates at the northern edge of the Yolla-Bolly wilderness area, in Trinity County, approximately 100 miles southeast of its outlet to the Pacific Ocean. Its associated riparian corridor forms the northern portion of the City's perimeter greenbelt and a natural buffer between Arcata and the community of McKinleyville, to the north.

Wetlands provide flood protection, groundwater recharge, water quality treatment, food production and wildlife habitat, which are valued by the community. Wetlands are highly productive, complex ecosystems, seasonally or permanently saturated, and support specially adapted vegetation. Wetlands are often found in transitional zones, or ecotones, between uplands and open water habitats. Arcata's marshes may be among the best examples of local wetlands. The Aldergrove marsh was a log pond that has now been reconstructed and significantly enhanced as a ten acre freshwater marsh, as part of the Aldergrove Industrial Park development. A plan view of the 170 acre Arcata Marsh and Wildlife Sanctuary is shown on the following page.



Arcata Bay is part of Humboldt Bay, which is fourteen miles in length, from north to south; covers more than 17,000 acres; and is the second largest coastal estuary in California. A significant portion of the northerly waters of Arcata Bay are owned by the City, are within its City limit, and represent a significant natural, visual, aquacultural, and recreational resource for the community. The tidelands adjacent to the Bay include salt marshes and sloughs, excepted where diked/reclaimed and used as pastureland.



Overview of agricultural resources. Agricultural lands represent an important natural resource within the City. Arcata's agricultural lands are currently used primarily for flowers, silage and hay production, food production, and livestock grazing. The Ferndale, Russ, and Loleta series are Arcata's most productive agricultural soils.

The agricultural lands in and around Arcata produce crops of raspberries, strawberries, lilies, daffodils, potatoes, corn, artichokes, hay (forage for cattle), and a number of other shallow rooted crops. There is community support for the continuation of dairy, beef, vegetable, fodder, and flower production in the City and the Planning Area, and recognition that protection of agricultural values, as well as open space and recreational values, is important.

Arcata's agricultural lands include farmed wetlands. Most of the farmed wetland areas around Humboldt Bay are former tidelands, once owned by the State, which private parties acquired from the State under the Swamp and Overflowed Lands Act. These lands were diked/reclaimed around the turn of the century.



These areas are below ten feet in elevation, have relatively impermeable soils, and retain run-off for long periods of time. While the State conveyed the fee title interest in these former tidelands, they are still subject to an easement under the Public Trust Doctrine, for the benefit and enjoyment of the people of this state. Much of this Public Trust land bordering Arcata bay can provide important wildlife habitat and recreational opportunities.

These farmed wetlands are no longer salt and brackish wetlands, but now function as freshwater wetlands, with meandering year-round creek and slough channels. Arcata's diked former tideland areas typically include the less productive types of Loleta and Bayside soils and are generally used for pasture.

Soil classifications are based on the most recent surveys. In the event that an updated soil survey is completed in the future, the classifications and associated mapping shall be changed accordingly.

Overview of forest resources. The eastern portion of Arcata is located on forested slopes of Fickle Hill Ridge. The slopes contain mostly second growth conifer stands. These forested lands are both publicly and privately held. The City of Arcata owns two separate tracts of forest land that comprise approximately 1,125 acres. Together, the publicly owned Arcata Community and Jacoby Creek Forests constitute a significant ecological, recreational, economic and educational resource for the citizens of Arcata and the surrounding region.

The City adopted the *1994 Arcata Community Forest & Jacoby Creek Forest Management Plan* to provide guidance for integrated multi-resource management activities and to establish standards and guidelines for the Arcata Community Forest and Jacoby Creek Forest. The Resource Conservation and Management Elements contain overall goals and policies for forest management. The Forest Management Plan includes goals, policies, detailed management direction, monitoring and evaluation techniques for the City-owned forests. The forest management plan goals are listed below.



THE 1994 ARCATA COMMUNITY FOREST & JACOBY CREEK FOREST MANAGEMENT PLAN GOALS ARE TO :

- Maintain the health of the forest system, specifically, maintain the integrity of the watershed, wildlife, fisheries and plant resources, their relationships, and the process through which they interact with their environment.
- Produce marketable forest products and income to the City in perpetuity, balancing timber harvest and growth.
- The Community Forest shall also be managed to provide forest recreational opportunities for the Community.
- The City's forests shall serve as models of managed redwood forests for demonstration and educational purposes.

Guiding Principles and Goals.

- A. Protect, maintain and enhance natural ecosystem processes and functions in the region, in order to maintain their natural ecological diversity.
- B. Restore and maintain the physical and biological integrity of Arcata's streams.
- C. To protect, restore, enhance, and maintain riparian habitat on those lands subject to wetlands and streamside protection zone.
- D. Recognize and protect wetlands as highly productive complex ecosystems that provide vital habitat and cleansing systems.
- E. Restore and maintain the physical and biological integrity of publicly owned former tidelands (farmed wetlands) subject to the Public Trust easement, to a diversity of tidal, freshwater, and riparian habitats.
- F. Protect and enhance prime agricultural lands for their food production, resource, and aesthetic values.
- G. Manage a sustainable production of forest products on both public and private timberlands.
- H. Manage water resources at the watershed level, to maintain high ground and surface water quality.
- I. Manage surface and groundwater resources to provide water quality and quantity adequate to support natural ecosystem processes and functions.
- J. Conserve soil resources as the foundation of resource production, and minimize erosion and other soil depleting processes.
- K. Promote energy conservation, and development and use of alternative, non-polluting, renewable energy sources for community power in both the public and private sectors.
- L. Maintain an active relationship with adjacent communities and government agencies to encourage cooperative management of natural resources and ecosystems in Arcata's Planning Area.
- M. Conserve natural resources through reduced materials consumption and recycling (see integrated waste management policies in the Public Facilities & Infrastructure Element).
- N. Establish an Agricultural Advisory Committee to help maintain a compatible relationship between agricultural and non-agricultural activities and uses.



4.5 POLICIES

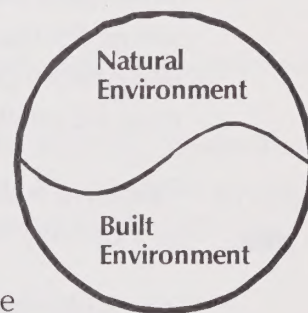
The following policies are included in the Resource Conservation and Management Element:

- RC-1 Natural Biological Diversity/Ecosystem Function
- RC-2 Streams Conservation & Management
- RC-3 Wetlands Management
- RC-4 Open Waters of Arcata Bay and Tidelands
- RC-5 Agricultural Resources Management
- RC-6 Forest Resources Management
- RC-7 Water resources Management
- RC-8 Energy Resources Management
- RC-9 Soils and Mineral Resources

POLICY RC-1 NATURAL BIOLOGICAL DIVERSITY/ ECOSYSTEM FUNCTION

Objective. Set an overarching policy that emphasizes the overall value of biological diversity and the fact that all natural resources are optimized when they function as part of a healthy ecosystem.

RC-1a **Maintain Biological and ecological integrity.** Maintaining ecological balance, system function, biological integrity, and natural diversity is the primary focus of the Resource Conservation and Management Element. Protecting ecological functions of natural habitats, and natural drainage and infiltration processes, will enhance natural ecosystems in the Planning Area. Ecological system functions elements and processes are maintained through the following measures:



1. The structure and composition of ecological systems within the City shall contain the same native plant and animal species, in the same relative abundances and proportions, which are found in the least-disturbed natural ecosystems in the Planning Area.
2. The ecological functions performed by ecological systems in the City shall resemble the functions of the least-disturbed natural ecosystems in the Planning Area.
3. Ecological systems and natural processes are not disrupted by exotic organisms to a significant degree.
4. Ecological systems and natural processes are not to be disrupted by land use activities to a significant degree (e.g., a culvert or other drainage device that blocks fish passage).

An "adaptive management" approach shall be utilized to maintain ecological and biological integrity, including monitoring the status of ecological systems in the City and adjusting City implementation of this Plan, in order to more closely approximate the conditions provided in the Planning Area's least-disturbed natural ecosystems.

- RC-1b  **Non-native plant and animal species.** Some non-native species, such as pampas grass (*Cortaderia jubata*), Himalaya berry (*Rubus discolor*), Scotch broom (*Cytisus scoparius*), blue gum eucalyptus (*Eucalyptus globulus*), English ivy (*Hedera helix*), English holly (*Ilex aquifolium*), and cotoneaster (*Cotoneaster franchetii*), are invasive exotics that can and do displace native species. The presence of these non-native species reduces the area's natural diversity, biological integrity and aesthetics. Only native species, or species demonstrated to be non-invasive, shall be used in public landscapes and are to be strongly encouraged in private landscapes. The City shall provide public information that explains why invasive species are a problem. The City shall also maintain a program that recommends effective but non-toxic eradication measures, and eradicates non-native species on public lands where they are displacing native species.

- RC-1c  **Habitat value protection.** Environmentally sensitive habitat areas (ESHA) shall be protected against any significant disruption of their habitat values, and only uses dependent on and compatible with maintaining those resources shall be allowed within ESHAs. Proposed development in areas adjacent to ESHAs shall be sited and designed to prevent impacts which would significantly degrade such areas, and must be compatible with the continuance of such habitat areas.

- RC-1d  **Sensitive habitat definition.** The City declares the following to be ESHAs within the Planning Area:

1. Rivers, creeks, sloughs, and associated riparian habitats: Mad River; Jacoby Creek; Beith Creek; Grotzman Creek; Campbell Creek; Jolly Giant Creek; Janes Creek; Gannon Slough; Butcher Slough; and McDaniel Slough.



2. Wetlands, estuaries, and associated riparian habitats: Arcata Bay; Mad River Slough; Liscom Slough; Butcher Slough; the Aldergrove marshes and ponds; and the Arcata Marsh and Wildlife Sanctuary.
3. Other unique habitat areas: waterbird rookeries; shorebird concentration sites; habitat for all rare, threatened, or endangered species on federal or state lists; and vegetated dunes.
4. Public Trust lands such as grazed or farmed wetlands (i.e., diked/reclaimed former tidelands).

RC-1e  **Threshold of City review for sensitive habitat effects.** Development on parcels designated Natural Resource [NR] on the Land Use Plan Map, or within 250 feet of such a designation, or development potentially affecting a sensitive habitat area, shall be required to be in conformance with applicable habitat protection policies of this Element. All proposed development plans, including grading and drainage plans, submitted as part of a planning entitlement application for these areas, shall show the precise locations of all sensitive habitat areas on the site plan.

RC-1f  **Sensitive habitat buffer requirements.** A setback separating all permitted development from adjacent sensitive habitat areas shall be required. The purpose of such setbacks shall be to prevent any degradation of the ecological functions provided by the habitat area as a result of the development. The following shall apply to such setbacks:

1. The minimum width of setbacks for streams and wetlands shall be as provided in policies RC-2 and RC-3, respectively.
2. The minimum width of all other habitat setbacks shall be 100 feet, unless the designated setback would eliminate all reasonable use of the property.
3. A definition and map of sensitive habitat will be maintained by the City.

RC-1g  **Sensitive habitat information required in development application review.** Where there is a question regarding the boundary, buffer requirements, location, or current status of an ESHA identified pursuant to General Plan policies, the public or private applicant shall provide the City with the following:

1. Base map delineating topographic lines, adjacent roads, and location of dikes, levees, flood control channels, and tide gates, as applicable.
2. Vegetation map, including identification of species that may indicate the existence or nonexistence of a sensitive environmental habitat area.
3. Soils map delineating hydric and non-hydric soils.
4. Census of animal species indicating the existence, or non-existence, of an environmentally sensitive habitat area.

This information shall be provided to the Department of Fish and Game, US Fish and Wildlife Service, National Marine Fisheries Service, and other affected agencies for review and comment. Any comments and recommendations provided by the Department shall be immediately sent to the applicant for his or her response. The decision concerning the boundary, location, or current status of the environmentally sensitive habitat area in question shall be based on the substantial evidence in the record and supported by written findings.



- RC-1h  **Habitat integration for ecological integrity and development of a protected habitat corridor system.** An ecological connection network plan for linking native habitats in the Planning Area, and all of the environmentally sensitive habitat areas identified in this Plan, shall be prepared. The network shall incorporate all existing large areas (or "nodes") of habitat for fish and wildlife species (such as marshes and forests) and "linkages" or "corridors" of natural habitat (such as stream zones and sloughs) for migration and species movement. The plan will link large "nodes" of natural habitat together with the "linkage" connections as a functioning ecological network. Nodes and linkages shall include a "core" of natural ecosystem elements and shall provide a protected "buffer" along the outer margins of the core habitat which shall function to protect the ecological values in the "core" habitat.

- RC-1i  **Use of biocides and other compounds with biological consequences.** Pesticides, herbicides and insecticides (biocides); hormones and antibiotics (growth promoters); and hydrocarbon based compounds, used both commercially and individually, can accumulate to toxic levels in biological organisms, including humans. Certain of these substances, even at low levels, can affect reproductive health.

The City shall maintain and make available a current list of alternative, environmentally-safe products for controlling unwanted vegetation and pests, growing crops and enhancing production of animal products. The use of substances and compounds which can accumulate to toxic levels is restricted by the City (Pesticide Ordinance), and a program for fostering the reduction in private use shall be developed and implemented.

POLICY RC-2 STREAMS CONSERVATION & MANAGEMENT

Objective. Enhance, maintain, and restore the biological integrity of entire steamcourses (headwaters to mouth), and their associated riparian habitats, as natural features in the City's landscape.

RC-2a **Designation of protected streams.** The provisions of this policy shall apply to those streams shown on the Protected Watercourse Map (Figure RC-a). These watercourses and their associated riparian areas serve as habitat for fish and wildlife, provide space for the flow of stormwater runoff and flood waters, and furnish open space and recreational areas for city residents.

RC-2b **Streamside Protection Areas (SPA).** A streamside protection area is hereby established along both sides of the streams identified on the City Watercourse Map. The purpose of the SPA is to remain in a natural state in order to protect streams' ecosystems and their associated riparian habitat areas. The SPA shall include:

1. In areas where existing development, as defined in the Land Use Code, is adjacent to the stream, the SPA shall be not less than 25 feet outward on both sides of the stream, measured from the top of bank.
2. In all other locations within the City, the SPA shall be not less than 100 feet outward on both sides of the stream, measured from the top of bank.
3. In locations within the City having significant areas of riparian vegetation exceeding 100 feet in width measured from the top of bank, the SPA shall be expanded to encompass all of the riparian vegetation, except in no case shall the SPA exceed 250 feet in width from the top of bank on either side of the stream.

SPAs outside of the City shall follow the policies in the Humboldt County Framework Plan, regarding Streamside Management Areas.

RC-2c **Allowable uses and activities in streamside protection areas.** The following compatible land uses and activities may be permitted in SPAs, subject to all other policies in this Element, including those requiring avoidance of impacts and other mitigation requirements:

1. Outside the Coastal Zone:
 - a. agricultural operations compatible with maintenance of riparian resources;
 - b. fencing along property boundaries and along SPA setback boundaries to prevent bank erosion and degradation of natural riparian vegetation by livestock;
 - c. maintenance of existing roads, driveways, and structures;
 - d. construction of public road crossings;

- e. forest management practices as permitted by the State of California or Arcata's Forest Management Plan;
 - f. construction and maintenance of foot trails for public access;
 - g. construction and maintenance of utility lines;
 - h. resource restoration projects;
 - i. emergency or preventive removal of sediment and vegetation for flood control purposes (only when authorized by the City of Arcata).
 -  2. In the Coastal Zone:
 - a. all uses and activities listed in (1) above;
 - b. public coastal access improvements;
 - c. boat launching facilities.
 - 3. If the provisions herein would result in any legal parcel, not on Public Trust lands, created prior to the date of this plan, being made unusable in its entirety for any purpose allowed by the land-use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel, subject to approval of a conditional use permit. Any land use, construction, grading, or removal of vegetation which is not listed above shall be prohibited.
- RC-2d **The Wetland and Stream Protection Combining (:WSP) Zone.** The :WSP zone of the Land Use and Development Code shall be applied to all streamside protection areas. [The WSP zone should be a land use designation under the NR district, e.g., NR-WSP, NR-AG, NR-TPZ.]
- RC-2e **Review and approval of projects affecting streamside protection areas.**
 Applications for development on any parcel which is located partially or wholly within an SPA shall be subject to the requirements of Policy RC-1 and RC-2.
- RC-2f **Conservation easement.** Dedication of a conservation easement, or equivalent deed restriction, encompassing the area within the SPA shall be required as a condition of approval of any discretionary planning permit, including design review, when any portion of the project site falls within an SPA. Such easements may be conveyed to the City of Arcata, to another governmental agency which shall manage the easement to protect the SPA's functions, or to an appropriate non-profit entity.
- RC-2g **Maintenance of streams as natural drainage systems.** Arcata's creeks carry a significant amount of the City's stormwater. Drainage controls shall be enforced through implementation of the Drainage Master Plan, to protect water quality, and minimize erosion, sedimentation and flood impacts to City creeks. A comprehensive stream maintenance program shall be prepared to augment stormwater utility rehabilitation projects designed to improve flow capacity, minimize channel erosion, and enhance riparian habitat.


RC-2h Restoration of degraded creek resources. Portions of Janes, Jolly Giant, Campbell, and Grotzman Creeks are culverted or covered, causing degradation of creek resources. Streams such as Janes Creek have tide gates which are barriers that prevent anadromous salmonids from accessing critical habitat. Furthermore, recreational use has degraded riparian vegetation along upland reaches of certain creeks (e.g., Jolly Giant, Campbell, and Jacoby Creeks) within Redwood Park and the Community Forest. Lack of vegetation along creek courses can cause erosion, resulting in water and airborne impacts. Restoration activities for improving degraded stream resources shall include:

1. Uncovering of creek courses in public rights-of-way, as part of public works improvement projects.
2. Encouraging landowners to restore degraded SPA and stream resources, including native riparian vegetation establishment and exotic species removal, as part of a new development or renovation.
3. Controlling uses that are damaging to upland reaches of creeks in the Community Forest and Redwood Park.
4. Removing or modifying barriers such as tide gates that prevent migrating anadromous salmonids which are federally listed endangered species from reaching their critical habitat.
5. Exclusionary fencing to keep livestock out of the SPA.

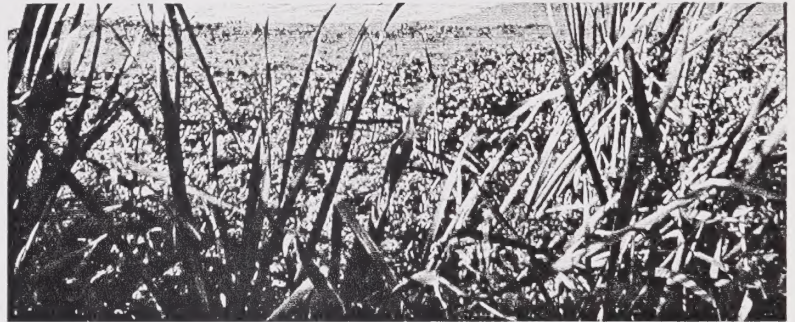
The Streams Management Plan shall be implemented to provide guidance for rehabilitation and management of creeks that flow through Arcata. The SMP addresses new and modified development along creeks, and existing activities in creek zones. Stream rehabilitation projects shall be designed to maintain or improve flow capacity, trap sediments and other pollutants which decrease water quality, minimize channel erosion, prevent new sources of pollutants from entering the stream, and enhance instream and riparian habitat.

POLICY RC-3 WETLANDS MANAGEMENT

Objective. To protect existing wetlands areas and their functional capacities and values, maintain a standard of “no net loss” in area and value, restore degraded wetland areas, enhance wetlands functions, and create additional wetland areas to replace historical losses.

RC-3a Requirement for wetland delineation and study. All proposed development applications shall include a site plan that shows the precise location of any wetlands that exist on the subject property. Any application for development on a parcel where wetlands may be present shall include a wetland reconnaissance or delineation report as follows:

1. The reconnaissance or wetlands delineation and report shall be based upon field investigations and shall be prepared by a professional or technical expert qualified in wetlands biology or plant ecology.
2. For purposes of this plan, wetlands shall include those lands where one or more of the following three characteristics are present:
 - a. source of water (surface or subsurface) which is present for sufficient periods to promote hydric soils formation or growth of hydrophytic plant species;
 - b. hydric soils; or
 - c. hydrophytic plants.
3. Where a reconnaissance indicates the probable existence of wetlands, marsh reeds detailed wetland delineation shall be required, including a map with the best available contour information showing where each of the three factors are present and the precise boundaries of any areas which are determined to be wetlands.
4. If wetlands of any size are found to exist on the property, an analysis of the potential functional or habitat value of the wetlands shall be provided.



RC-3b Filling of wetlands. The following shall apply:



1. Filling of wetlands shall be prohibited in the Coastal Zone, unless it can be demonstrated that:
 - a. the wetland restrictions, if imposed, would render a parcel, not subject to the Public Trust, unusable for any use permitted by the land use plan;
 - b. there is no feasible, environmentally superior alternative to wetland fill for development of a permitted use; and
 - c. the fill is the least amount necessary to allow development of permitted uses.
2. Filling of wetlands outside the Coastal Zone may be permitted only when the following has been demonstrated by the project proponent:
 - a. the fill is the least amount necessary to allow a reasonable and harmonious configuration of development on the parcel;
 - b. the wetlands proposed to be filled are small and isolated, and have limited functional value when compared to larger, contiguous wetland areas.
3. Filling of wetlands shall only be authorized if appropriate mitigation, resulting in "no net loss" in area and value of wetlands, is provided. Mitigation may consist of creating and maintaining a new wetland of equal or greater functional capacity and value than the wetland proposed to be filled, restoration of previously degraded wetlands, or enhancement of existing wetland areas.

RC-3c Designation of Wetland Protection Areas (WPA). A WPA shall be established to separate all permitted development from adjacent existing wetlands which are to be preserved in a natural state and new wetland areas which are created as a mitigation. The WPA's purpose is to remain in a natural state in order to protect wetland ecosystems and their associated habitat areas from destruction or degradation. The extent of the WPA shall be established based upon analyses and recommendations contained in a site-specific wetland delineation study, but shall include the wetland area and a setback area which shall generally range from a 50 foot minimum to a 100 foot maximum. Specific findings, based on evidence provided for City review, shall be required for setbacks less than 100 feet.

RC-3d Allowable uses and activities in Wetland Protection Areas. The following compatible land uses and activities may be permitted in WPAs, subject to all other policies in this Element, including those requiring avoidance of impacts and other mitigation requirements:



1. Resource restoration or enhancement projects.
2. Farming, consistent with policy RC-3I.
3. Outdoor recreation activities, such as bird watching, hiking, boating, horseback riding, and similar activities.
4. Education, scientific research, and use of nature trails.
5. Drainage ditches when compatible with wetland function.
6. Minor modification of existing, serviceable structures.
7. Fencing to prevent livestock from degrading wetlands and riparian vegetation.

Any use, construction, grading, or removal of vegetation which is not listed above shall be prohibited.

RC-3e Wetland and Stream Protection Combining (:WSP) Zone. The :WSP zone of the City's Land Use Code shall be applied to all Wetland Protection Areas.

RC-3f Review and approval of projects affecting Wetland Protection Areas. Applications for development on any parcel which is located partially or wholly within a WPA shall be subject to the requirements of Policy RC-1 and RC-3.

RC-3g **Conservation easements.** Dedication of a conservation easement, or equivalent deed restriction, encompassing the area within the WPA shall be required as a condition of approval of any discretionary action, including design review, when any portion of the project site falls within an WPA. Such easements may be conveyed to the City of Arcata, another governmental agency, or City-approved non-profit entity which shall manage the easement to protect the WPA's functions.

RC-3h **Designation of wetland protection zones.** The :WSP Zone shall be applied to wetlands, wetland setbacks, wetland buffer areas and modified wetland buffer areas, as defined in the City's Land Use Code, at the time of development review and approval.

A wetlands map, maintained by the City, will show the general location of wetlands, riparian corridors, and uplands within the City limits and urban services zone. All development within or adjacent to the areas identified on the map as wetlands or riparian corridors shall comply with City Wetlands Development Standards and shall include the following:

1. A wetland delineation.
2. A mitigation plan for impacted areas.
3. Setback areas from delineated wetlands.
4. Easements for onsite delineated wetlands.
5. Permitted and protected uses/activities within delineated wetland areas.
6. Fencing to prevent livestock from degrading wetlands and riparian vegetation.

A Wetlands Buffer Area shall be required to protect the areas shown as wetlands on the Wetlands Map. All development within the buffer areas shall comply with the Wetlands Buffer Area Development Standards of the Coastal Land Use and Development Guide.

RC-3i **Management of Arcata Marsh for wetlands values as well as wastewater treatment.**



The marsh and wildlife sanctuary serves a variety of purposes and functions, including providing wetland habitat for a variety of species, wastewater treatment, and recreational use. These purposes shall be balanced for the benefit of all users.

RC-3j **Minimum mitigation requirements for wetland impacts.** Diking or filling of a wetland that is otherwise in accordance with



the policies of this General Plan, shall, at a minimum, require the following mitigation measures, monitoring program, and funding.

1. A detailed restoration plan, monitoring program, and funding source for each site shall be required as part of the project application. The restoration plan shall include provisions for restoration to equal or greater wetland biological productivity. The monitoring program shall include reporting requirements that document mitigation success. Dedication of the land to a public agency, purchase, or other stewardship method which permanently restricts the use of the site to habitat and open space purposes, shall be required. The site shall be dedicated, purchased, or other stewardship agreed upon, and mitigation funding shall be provided, prior to any permitted diking or filling.
2. Areas adequate to maintain functional capacity shall be opened to tidal action, or other sources of surface water shall be provided. This provision shall apply to diked or filled areas which themselves are not environmentally sensitive habitat areas, but would become so if, as part of a restoration program, they are opened to tidal action or provided with other sources of surface water. All of the provisions for restoration, purchase (if necessary), and dedication described under part 1 shall apply to any program or activity performed pursuant to this policy.
3. Mitigation shall, to the maximum extent feasible, be of the same type as the wetland to be filled (e.g., freshwater marsh for freshwater marsh, saltwater marsh for saltwater marsh, etc.).
4. Where no suitable private or public restoration or enhancement sites are available, or where a wetlands mitigation bank in Arcata's Planning Area has been established that provides suitable replacement area, an in-lieu fee may be required to be paid. The fees shall be paid to an appropriate public agency for use in the restoration or enhancement of an area of equivalent productive value or surface area, or to the entity managing the wetlands mitigation bank.

RC-3k



Wetland functional capacity maintenance requirement. Diking, filling, or dredging of a wetland or estuary shall maintain or enhance the functional capacity of these resources. Functional capacity means the ability of the wetland or estuary to be physically and biologically self-sustaining and to maintain natural species diversity. In order to establish that the functional capacity is being maintained, all of the following must be demonstrated:

1. Presently-occurring plant and animal populations in the ecosystem will not be altered in a manner that would impair the long-term stability of the ecosystem (i.e., natural species diversity, abundance and composition are essentially unchanged as the result of the project).
2. A species that is rare or endangered will not be significantly adversely affected.

3. Consumptive (e.g., fishing, aquaculture and hunting) or non-consumptive (e.g., water quality and research opportunity) values of the wetland or estuary ecosystem will not be significantly reduced.

RC-3I  **Uses allowed in diked/reclaimed former tidelands.** Allowable uses and development in grazed or farmed wetlands are limited to uses compatible with the Public Trust. These uses are specified in Land Use Element Policy LU-6 and are summarized below.

1. Agricultural operations limited to accessory structures, apiaries, field and truck crops, livestock raising, greenhouses (provided they are not located on slab foundations and crops are grown in the existing soil on site), and orchards.
2. Farm-related structures, including barns, sheds, and farmer-occupied housing, necessary for the performance of agricultural operations. Such structures may be located on an existing grazed or farmed wetland parcel only if no alternative upland location is available for such purpose and the structures are sited and designed to minimize adverse environmental effects on Public Trust resources and uses. No more than one primary and one secondary residential unit shall be allowed per parcel.
3. Restoration projects.
4. Nature study, aquaculture, and similar resource-dependent activities compatible with Public Trust resources and uses.
5. Incidental public service purposes which may temporarily impact the resources of the area (such as burying cables or pipes).

Expanding farming operations into non-farmed wetlands, by diking or otherwise altering the functional capacity of the wetland is not permitted. Farm-related structures (including barns, sheds, and farm-owner occupied housing) necessary for the continuance of the existing operation of the farmed wetlands may be located on an existing farmed wetland parcel, only if no alternative upland location is viable for such purpose and the structures are sited and designed to minimize the adverse environmental effects on the farmed wetland. Clustering and other construction techniques to minimize both the land area covered by such structures and the amount of fill necessary to protect such structures will be required.

POLICY RC-4 OPEN WATERS OF ARCATA BAY & TIDELANDS

Objective. Maintain existing Bay wetlands and tide lands, protect them from urban and agricultural encroachments, or degradation, and manage the open waters of Arcata Bay for their wildlife, fisheries, navigation and ecological values and recreation and tourism uses.



RC-4a Protection of open waters /tideland areas of Arcata Bay.

The tidal and water areas of Arcata Bay constitute a fragile Public Trust resource and access shall be controlled to avoid resource degradation, while maintaining the public's right to navigation. Tidal marshes shall be enhanced and maintained, especially in the areas of McDaniel, Gannon, and Butcher's Sloughs, to protect wetland values.

RC-4b Access to Arcata Bay. The following routes are designated as Public Access

Corridors and are to be properly signed and identified as approved Bay access points.

1. "I" Street from Samoa Boulevard, south through the Arcata Marsh and Wildlife Sanctuary to the boat launching facility on Arcata Bay.
2. South "G" Street south of "H" Street, to Highway 101.
3. Highway 101 from Samoa Boulevard (Highway 255), south to Bayside Cutoff.
4. Samoa Boulevard from Highway 101 west to Mad River Slough.

A system of foot trails and interpretive sites shall be established along the Arcata Bay shore westward to the City limit, subject to the following guidelines.

5. All planning and development in the area that is both South of Samoa Boulevard and west of State Route 101 and which is identified as tidelands, former tidelands, wetlands or riparian corridor on the adopted Wetlands Map shall be reviewed by the Creeks & Wetlands Committee, and coordinated with California Department of Fish and Game.
6. Development in the area bounded by Butcher's Slough and Gannon Slough should occur in conjunction with management of the National Wildlife Refuge and the Arcata Marsh and Wildlife Sanctuary.
7. Motorized vehicles shall be restricted to paved roads and parking lots.
8. Pedestrians shall be restricted to designated trails and facilities.
9. Valid scientific and educational studies of wetlands and tidelands are encouraged.

RC-4c Coastal-dependent and public trust uses of Arcata's tidelands. Tidelands of Arcata

Bay support a variety of wildlife as well as human activities. The following provisions shall be made for managing tideland areas.

1. New development shall not restrict access to the shoreline. Access to coastal areas shall be required for new development.
2. Tidelands and water areas of Arcata Bay shall be designated Natural Resource-Public Trust Lands [NR-PTL], and identified as passive use recreational areas.

3. The Arcata Marsh and Wildlife Sanctuary shall be designated as Natural Resource [NR] and the recreational component of the project identified as a passive use recreational area.
4. The continued use of the tideland for scientific and educational studies is encouraged.
5. The Arcata Marsh and Wildlife Sanctuary (AMWS) shall be maintained and new facilities shall be consistent with the AMWS plan adopted by the City Council.
6. The South "I" Street boat launch shall be enhanced and maintained to accommodate small watercraft and windsurfing.
7. The placement of interpretative sites along the Arcata Bay shore, including Nature and Wildlife Centers, shall be coordinated with other agencies, and serve as an educational focal point for Arcata's natural resource areas.
8. Access on the levee from the AMWS westward to the City limit will be provided for passive recreation and nature observation.



RC-4d Diking, dredging, filling, and shoreline structures. Diking, filling, or dredging of Bay waters, wetlands, and estuaries shall be permitted where it has been demonstrated that the Public Trust resources and values are being protected, and mitigation measures have been provided, which minimize adverse environmental effects, for the following limited uses.



1. Incidental public service purposes including, but not limited to, burying cables and pipes, and maintaining existing dikes and public facilities.
2. Maintaining a channel adequate to serve the boat ramp at current levels of use.
3. Resource restoration purposes.
4. Nature study, aquaculture, or similar Public Trust resource dependent activities.
5. Agriculture as currently practiced within existing farmed wetlands but not including the expansion thereof.

In order to protect existing development, shoreline structures (such as dikes or tidegates) that may alter the natural shoreline, may be permitted only when they do not effect any federally listed species and no other feasible, less environmentally-damaging alternative is available, and only when not located within a wetland, unless the wetland will be the primary beneficiary of the structure.

The disposal of dredge spoils on existing wetlands shall not be permitted unless such disposal is necessary for either a Public Trust resource restoration project or for

the maintenance of existing agricultural operations in farmed wetlands. Fill will be allowed for aquaculture projects if it can be shown that it is necessary for the project, is required to be located within the wetland, and there is no other feasible, less environmentally damaging, alternative.

RC-4e  **Aquaculture use of coastal wetlands/tidelands.** To protect aquaculture activities in Arcata Bay, the City shall:

1. Ensure that its wastewater discharge does not aggravate existing coliform loading problems in Arcata Bay.
2. Take measures to reduce coliform loading of perennial streams within its jurisdiction, as part of a stream maintenance program. These measures shall include controlling identified sources of coliform loading such as septic tank leachate and runoff from agricultural operations.

Aquaculture shall not adversely impact natural ecological processes nor native wildlife or fisheries or their habitat in the Bay. No new aquaculture uses shall be permitted unless it can be demonstrated that adequate precautions will be taken to prevent new adverse impacts to natural ecological processes. The City shall continue its management of:

1. Integrated wetland enhancement and wastewater treatment.
2. The tidelands, for commercial and native oyster harvesting.

RC-4f  **Management of bayfront and marsh areas for coastal access, recreation, and tourism.** Tidelands and water areas of Arcata Bay shall be designated Natural Resource-Public Trust Land [NR-PTL] and protected from uncontrolled access. The following guidelines shall be used when permitting access to these areas:

1. Motorized vehicles shall be restricted to paved roads and parking lots.
2. Pedestrians shall be restricted to designated trails and facilities.
3. Valid scientific and educational studies of the wetlands and tidelands shall be encouraged.

New development shall not restrict public access to the shoreline. Public access to the shoreline shall be required of new development. Where consistent with the Humboldt Bay National Wildlife Refuge's Management Plan, controlled public access to the Refuge's Jacoby Creek Unit shall be developed along Arcata Bay from the AMWS to the City's westward limit.

POLICY RC-5 AGRICULTURAL RESOURCES MANAGEMENT

Objective. Protect and enhance agricultural uses on prime agricultural lands within the City, and encourage more productive agricultural use of agriculturally suitable lands.

RC-5a Promotion of and participation in agricultural production within the City. Diverse and intensive agricultural production and increased participation shall be promoted, in order to maintain the value of agricultural lands, improve the economic base, and increase employment and food production. The City does not, however, advocate more intensive agricultural uses and practices that would have adverse environmental impacts. Agricultural operations, such as Community Supported Agriculture (CSA) are strongly encouraged.



RC-5b Agricultural Advisory Committee. The City shall appoint an Agricultural Advisory Committee to advise on agricultural issues and programs. The responsibilities of the committee shall include, but are not limited to:

1. Development of a Community and Farm Protection Ordinance, as well as conflict resolution protocol.
2. Development of programs (educational, leasing, and purchase) that will encourage responsible productive uses of agricultural lands.
3. Identification of lands for preservation and/or acquisition programs.
4. Maintain a database of resources available to farmers, such as Williamson Act advantages, conservation easements, organic farming practices, and marketing strategies.

RC-5c Community and farm protection. Maintaining a compatible relationship between agricultural and residential uses will be based on:

1. Recognizing the rights of owners of productive agricultural land to make agricultural use of their land.
2. Identifying and minimizing potential conflicts between agricultural operations and adjacent residential, commercial, and community facility uses.
3. A Community and Farm Protection Ordinance shall provide a foundation for minimizing conflicts, educating the community, and a protocol for mediating unresolved disputes. Once adopted, the ordinance shall be mailed to all owners of agricultural and adjacent lands and disclosed to affected property owners at the time of parcel transfer.

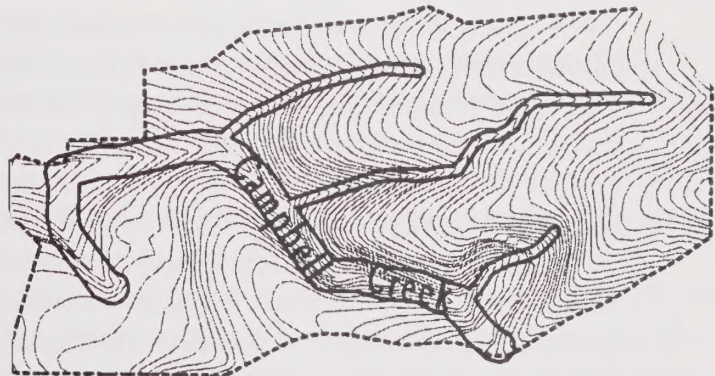
RC-5d **Permanent protection for agricultural lands.** Protection of agricultural resources shall be secured through the purchase of conservation easements, development rights, and outright acquisition. The City shall work in conjunction with other entities such as land trusts, whenever possible, to preserve agricultural buffers and maintain and enhance agricultural uses on prime agricultural soils.

POLICY RC-6 FOREST RESOURCES MANAGEMENT

Objective. Protect and enhance private and public forest lands (Community and Jacoby Creek) to maintain the integrity of the ecosystem while providing timber production, recreation, and habitat values.

RC-6a **Management of Arcata Community Forest.** The City's forest management plan includes the following policies:

1. **Recreation and aesthetics resource management** - The community forest will emphasize dispersed, day-use opportunities. Recreational use shall not be allowed to impact other resources such as fish, wildlife, or watershed.
2. **Timber resource management** - To ensure the sustainable and long-term production of forest products, the rate of harvesting must not exceed the rate of production. Long-term productivity refers to the continuing ability of the forest to produce timber while retaining the associated values of watershed, wildlife, soils, recreation and aesthetics. This is dependent upon the use of management practices that do not allow for the deterioration or impairment of soil productivity or the alteration of the natural landscape beyond its ability to recover. For planning purposes, long term means that exceeding fifty years.
3. **Watershed resource management** - Water quality, soil, riparian, and aquatic biological productivity shall be maintained and enhanced through the application of City forest management standards and the implementation of watershed improvement projects.



4. **Wildlife resource management** - Wildlife habitat is managed to promote species diversity and to ensure that populations of indigenous species are maintained. This can best be achieved through the maintenance and enhancement of habitat values. Habitat values which lead to species diversity include the following elements: breeding, foraging, watering, rearing, hiding and thermal cover.
5. **Vegetation and botanical resources** - Maintain the native component of species found in the redwood forest, both by controlling exotics and managing for a species mix that would be found naturally in the redwood forest.

RC-6b **Management of Jacoby Creek Forest.** The management policies for the Jacoby Creek Forest are the same as those for the Arcata Community Forest, listed above, except that the Jacoby Creek Forest is not open to recreational use.

RC-6c **Allocation of forest fund revenues.** At least twenty percent of net forest fund revenues, derived from timber cutting, shall be directed towards park acquisition, maintenance, and development. This can include acquisition of stream corridors, and riparian and greenbelt areas. These areas contribute to the diversity of parks and, in the case of linear parks along stream corridors, provide passive recreation areas compatible with the environment. The acquisition of open space shall be emphasized as an appropriate use for the remaining revenues.

RC-6d **Management practices for private timberlands.** The management of private timberlands shall be encouraged to use current principles of sustainable forestry for all aspects of forest use and function: recreation; timber production; biodiversity; air and water quality; and carbon storage. Timber owners are encouraged to apply for conservation easements, certified forestry, or compensation for carbon storage.

RC-6e **Timber harvest plans.** The City, in cooperation with California Department of Forestry, shall request review of all Timber Harvest Plans (THP) within the Planning Area. The City shall review THPs for measures that protect water quality, control erosion and flooding, and preserve the City viewshed. The city shall recommend that THPs which do not include these measures not be approved.

RC-6f **Urban conversions.** The sustainable management of timber resources, and related uses, shall be encouraged, so that the long term economic return from productive timber production will provide sufficient incentives to prevent urban conversions. Urban conversions are discouraged within the Urban Services Boundary.

RC-6g **Setbacks.** Development adjacent to the Community Forest boundary shall be setback at least 150 feet, unless this would make the use of the parcel infeasible for its designated purpose. However, larger setbacks may be required to prevent exposure to potential hazards and to maintain forest integrity.

RC-6h **Monitoring.** Monitoring of forest practices, to ensure consistency with adopted management and harvest plans, shall be carried out as an implementation measure of this Element. The general objectives of the monitoring will be to:

1. Determine the effectiveness of management practices at multiple scales (i.e., individual sites to watersheds).
2. Validate ecosystem functions and processes have been maintained as predicted.

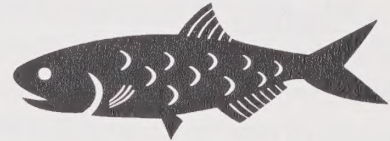
POLICY RC-7 WATER RESOURCES MANAGEMENT

Objective. Manage Arcata's water resources from a watershed perspective, to maintain surface and subsurface water quality and quantity. Runoff will be managed for the benefit of aquatic habitats.

C-7a **Protection of surface waters from point and nonpoint pollution sources.** The use of natural stormwater drainage systems, which preserve and enhance natural features, shall include the following:



1. Efforts to acquire land or obtain easements for drainage and other public uses of floodplains, where desirable to maintain stream courses in a natural state, shall be supported.
2. Recreational opportunities and aesthetics shall be considered in the design of stormwater detention/retention and conveyance facilities.
3. Sound soil conservation practices shall be required, and impacts of proposed developments, with regard to water quality and effects on watersheds, wetlands and drainage courses, shall be carefully examined.
4. The quality of runoff from urban and suburban development shall be improved through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).
5. New development shall be required to mitigate to the maximum extent feasible increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on the Mad River, Arcata Bay, and adjoining lands in the City and Planning Area.
6. New project designs shall minimize drainage concentrations, maximize permeable surfaces (such as unpaved parking areas) and maintain, to the extent feasible, natural site drainage conditions.
7. New projects that affect the quantity and quality of surface water runoff shall be required to allocate land necessary for detaining post-project flows and/or for incorporating measures to mitigate water quality impacts related to urban runoff. To the maximum extent feasible, new development shall not produce a net increase in peak stormwater runoff.



RC-7b **Protection of groundwater sources.** Septic systems and onsite disposal of toxic substances are the leading causes of groundwater contamination. Septic systems within the Urban Services Boundary shall not be permitted, and incidents of onsite toxics disposal shall be referred to the appropriate county and state agencies.

RC-7c **Watershed and urban runoff management.** To protect structures, critical facilities, existing habitat values and water quality, flooding shall be managed on a watershed basis, using a combination of biotechnical solutions, flood protection practices, and Drainage Master Plan's management practices.

RC-7d **Water quality monitoring.** Water quality and quantity shall be monitored on a regular basis to ensure that City policies are being adhered to.

POLICY RC-8 ENERGY RESOURCES MANAGEMENT

Objective. Reduce the net emissions of greenhouse gases from Arcata; reduce other negative impacts of energy production and use, including risks from nuclear power, air emissions, fuel spills, and wildlife and habitat destruction; reduce energy costs to the city and its residents, and increase the percent of energy purchases from sources within our region; increase the city's and nation's energy security and reduce our vulnerability to changes in energy availability and price; increase public awareness of energy issues and encourage an energy conservation ethic; monitor the cost and effectiveness of Arcata's actions so we and others can learn from them; and implement Arcata's Advisory Proposition B.

Advisory Proposition B Approved by Arcata Voters April 8, 1980

"In accordance with America's renewed determination to be energy self reliant, be it resolved that the citizens of Arcata and their City government are committed to the enactment of conscientious energy conservation measures and the accelerated development and active promotion of safe and economical alternative renewable energy sources for our community.

Be it further resolved that the City government of Arcata support complete independence from nuclear power including the permanent closure of the Humboldt Bay nuclear power plant and its replacement by safe, clean and efficient generating sources more compatible with the resources and health and safety of the Northcoast, such as conservation, solar power and generation from wood waste."

- RC-8a **Encouragement of appropriate energy alternatives.** In making energy purchases, the City shall consider how suppliers meet the objectives of this policy. The City shall choose suppliers that provide good tradeoffs among these objectives, giving due consideration to investment in energy conservation as an alternative use of energy funds.

In addition, the City shall attempt to purchase at least 10% of its electrical energy (in energy units, not cost) from renewable sources within Humboldt County by the year 2020.

The City shall take measures to encourage the availability to, and use by, residents of energy suppliers that best meet the objectives of this policy. The City shall convert City vehicle fleets to a mix of fuels that best meets the objectives of this policy.

- RC-8b **Encouragement of energy efficiency and conservation.** The City shall coordinate with energy suppliers and agencies to educate residents, property owners, and business operators about the need for and benefits of conserving energy. The City shall maintain and distribute current information about building insulation; energy efficient appliances, lighting, and heating; other conservation measures and materials; and home power alternatives.

The City shall continuously seek and implement cost-effective steps to reduce City energy use. The City shall attempt to reduce the City's total consumption of purchased energy by at least 20% (in energy units, not cost) by the year 2010.



The City shall adopt the goals of the national "Energy Star Program" (or its successor programs) for all City construction projects and all construction projects assisted by grants for which the City is an applicant. These goals include using 30% less energy than would a building designed with existing Title 24 standards.

- RC-8c **Promotion of energy efficiency in transportation.** The City shall give strong consideration to energy conservation and the goals of this policy in all transportation and traffic management decisions. It is City policy to reduce the need for motor vehicle trips within the city and between the city and other destinations, and to reduce per-trip energy consumption; this policy applies to trips by residents, non-residents, and city staff. Such measures as bike and pedestrian paths, public transportation, parking and traffic management, and encouraging use of alternative-fueled vehicles shall be used to make these reductions.

POLICY RC-9 SOILS AND MINERAL RESOURCES

Objective. Conserve and manage soil and mineral resources.

RC-9a **Erosion control measures on slopes and other areas of instability.** Policy PS-3 - Other Geologic Hazards in the General Plan Public Safety Element includes provisions for protecting steep and unstable slopes, and minimizing erosion and sedimentation. This policy shall be followed as a safety precaution and also to conserve soil resources.

RC-9b **Protection of productive soils and soils with limitations.** Local soils range from productive soil types capable of supporting agriculture and forestry, to those susceptible to shrink-swell and erosion. Clay soils are the most susceptible to shrink-swell, caused by fluctuations in moisture content. According to available soils information, the Bayside series is the only soil type in the Arcata area with identified clay content. Building construction on this soil type shall include measures to avoid damage from shrink-swell.

Certain areas of the City have high liquefaction potential during seismic events. Policy PS-2 - Seismic Hazards, in the General Plan Public Safety Element, addresses mitigation of liquefaction hazards. This policy shall be followed as a safety precaution, and also to manage related soil limitations. Policy RC-5, relating to agricultural soils, shall also be followed to conserve productive soils. The continued research, identification, and protection of productive soils by the Natural Resource Conservation Service and educational institutions shall be encouraged.

RC-9c **Management of mineral resource extraction, processing and transport (gravel).** Areas along the Mad River, within and upstream of the City's Sphere of Influence, are currently used for aggregate resource extraction. The City shall encourage Humboldt County to limit the quantity of aggregate extracted to an amount that is mean annual recruitment; and request that Policy RC-1 and RC-2 be applied to protect natural biological diversity and ecosystem functions along the river. The City shall also request that the County not approve or renew permits for commercial mineral resource extraction in A-E designated lands of the City's Planning Area. Mineral resource operations shall not result in additional soil runoff and shall be consistent with the City's seismic safety policies (see Policy PS-2 in Public Safety Element).

4.6 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
RC -1	Creeks Management Plan Regularly update the City Creeks Management Plan, at least every five years, to implement current provisions for maintaining biological integrity of entire watercourses. The Creeks Management Plan will also include updated provisions for education and restoration programs for degraded creeks.	Environ-mental Services Dept./Creek Advisory Committee	Year 1 then every 5 years
RC -2	Community Forest Management Plan Update the Community Forest Management Plan, at least every ten years, to implement current provisions for managing recreation, aesthetic, timber, watershed, wildlife, and vegetation resources. The Management Plan will also include updated provisions for allocation of forest fund revenues and urban conversions, as well as setbacks from the Community Forest boundary and a monitoring program for forest practices.	Environ-mental Services Dept./Forest Management Committee	Year 5 then every 10 years
RC -3	Energy Efficiency and Conservation Program Conduct a continuous program to identify and purchase appropriate energy supplies, implement and evaluate energy conservation measures, provide energy education and public information, and promote energy efficiency in transportation. Establish a funding mechanism to assure that a significant portion of the savings are used to fund energy programs and as a reward for savings.	Environ-mental Services Dept./Energy Task Force	Year 1 then every 5 years
RC -4	Non-native Plant and Animal Species Removal Program The City shall provide public information that explains why invasive species are a problem. The City shall maintain a program that recommends effective but non-toxic eradication measures, and eradicates non-native species on public lands where they are displacing native species.	Environ-mental Services Dept./Agricultural Advisory Committee	Year 1 then every 5 years
RC -5	SPAs, :WSP Combining Zone, Resource Setbacks and Energy Conservation Measures (PLUC Amendment) Revise the PLUC (formerly LUDG) regulations to be consistent with the General Plan policies for SPAs, the :WSP combining Zone, natural resource (forest) area setbacks and energy conservation techniques.	Environ-mental Services Dept./Planning Commission	Year 1 then every 5 years
RC -6	Surface Water Quality Ordinance Prepare and adopt a water quality ordinance using water quality standards established in the Drainage Master Plan. The ordinance shall address the physical, biological, and chemical parameters of water quality, include monitoring provided through the MOU with HSU, and shall be updated at least every five years.	Environ-mental Services Department	Year 1 then every 5 years
RC -7	Wetlands Management Plan Prepare a Wetlands Management Plan that includes mapping of all known wetland areas, guidelines for wetlands management, setbacks, restoration goals and objectives, and review and approval requirements for wetland alterations.	Environ-mental Services Dept./Creek Advisory Committee	Year 2
RC -8	Sensitive Habitat Mapping Using the sensitive habitat definition from Policy RC-1d, prepare and regularly update a map of sensitive habitat in the City.	Environ-mental Services Dept.	Year 1
RC -9	Pesticide Ordinance Regularly update the City's Pesticide Ordinance.	Environ-mental Services Dept.	Every 5 years

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
RC -10	Create Agricultural Advisory Committee This City shall appoint a committee to be an impartial forum for addressing agricultural issues between property owners and agricultural operators. The committee will also be responsible for preparing the agricultural operations ordinance, researching incentives for continued agricultural operations, and advising the Planning Commission on any proposed development that would affect agricultural productivity.	City Council	Year 1
RC -11	Participate in Humboldt Bay Management Plan The City shall designate a representative to attend meetings, review documents, and represent the City's interest during the preparation of the Humboldt Bay Management Plan.	City Council appoints a representative	Year 1
RC -12	Community and Farm Protection Ordinance The Agricultural Advisory Committee shall develop and maintain a Community and Farm Protection Ordinance, which shall provide a foundation for minimizing conflicts, educating the community, and a protocol for mediating unresolved disputes.	Agricultural Advisory Committee	Year 1
RC -13	Biocides and Other Compounds Alternatives The City shall implement a program to foster the reduction in private use of pesticides. This shall include maintaining and making available a current list of alternative, environmentally safe products for controlling unwanted vegetation and pests, growing crops and enhancing production of animal products. The use of substances and compounds which can accumulate to toxic levels is restricted by the City (Pesticide Ordinance).	Environmental Services Dept.	Year 1

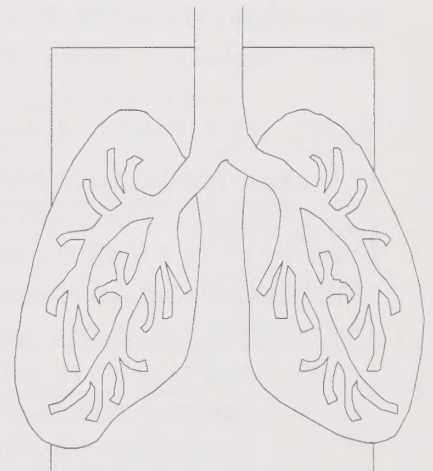
AIR QUALITY ELEMENT

4.7 INTRODUCTION

Overview of factors contributing to air pollution. One of the best ways to control air pollution is to develop transportation infrastructure and land use goals and policies which compliment and work in harmony towards air pollution control objectives. Air quality in the City of Arcata is regulated by the North Coast Unified Air Quality Management District (NCUAQMD). The NCUAQMD's primary responsibility is to achieve and maintain federal and state air quality standards. NCUAQMD currently meets all federal standards, but is classified as non-attainment (exceeds maximum limits) for California Ambient Air Quality Standards for airborne particles that are ten microns in diameter and smaller (PM-10).

Federal and state ambient air quality standards also include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. Of these pollutants, motor vehicles are a major contributor of carbon monoxide, nitrogen dioxides, and ozone. While engine and fuel improvements have significantly reduced these emissions from motor vehicles, measures to reduce vehicle travel can further improve air quality from these pollutants.

Particulate matter includes a wide range of solid or liquid particles including smoke, dust, aerosols, and metallic oxides. Two significant sources of PM-10 include motor vehicle exhaust with its associated secondary reactions in the atmosphere related to exhaust gases, and wood-burning stoves/fireplaces. PM-10 emissions associated with motor vehicles include vehicle exhaust and tire and brake wear. However, most particulate releases from motor vehicles are a result of road dust suspension. For example, road dust comprises 77% (580 tons/year) of vehicle-related PM-10 releases in the Arcata/Eureka area. Because road dust sources cannot be controlled, reductions in vehicle use are needed to significantly reduce PM-10 emissions caused by suspended road dust.



Wood-burning stoves, fireplaces, and residential open waste burning are also a source of PM-10 emissions. Research on human health effects of PM-10 show a correlation between elevated PM-10 concentrations and aggravation of chronic illnesses and elevated mortality rates. Fine particulate matter can affect health more than larger particles because it can bypass respiratory filtration systems and lodge deep in the lungs¹.

Overview of Arcata's air quality. Air quality is affected by both emissions and meteorological conditions. Arcata air quality is influenced by its coastal location and relatively stable temperatures are throughout the year. Temperatures average 50 degrees Fahrenheit, with a yearly average range of 40-60 degrees Fahrenheit. Prevailing winds are from the northwest in summer and southwest in the winter. During winter months moderate temperatures, frequent fog, and moderate to heavy precipitation cause inversions which impact air quality.

Arcata is within the northwestern most air district in the State, the NCUAQMD, which encompasses 7,100 square miles including the counties of Humboldt, Del Norte, and Trinity, and serves a population of nearly 170,000. The NCUAQMD presently meets all federal and state air quality standards, except for the state standard for particulate matter of ten microns and smaller (PM-10). The table below shows the federal and state PM-10 standards.

TABLE AQ-1 AMBIENT AIR QUALITY STANDARDS FOR PM-10 EMISSIONS

AVERAGING TIME	FEDERAL STANDARD	CALIFORNIA STANDARD
Annual Arithmetic Mean	50 ug/m ³	30 ug/m ³
24 Hour Average	150 ug/m ³	50 ug/m ³

Source: North Coast Unified Air Quality Management District Particulate Matter (PM10) Attainment Plan, Draft Report, 1995. ug/m³ = micrograms per cubic meter.

The NCUAQMD began measuring North Coast PM-10 concentrations in 1985. Of the total suspended particulates measured, PM-10 comprise approximately 60% of particulate matter. Table AQ-2 shows local PM-10 measurements.

TABLE AQ-2 PM-10 MEASUREMENTS IN THE ARCATA/EUREKA AREA

MONITORING LOCATION	MAX. 24 HOUR VALUE	ANNUAL AVERAGE
Arcata (1990)*	43.0	11.8
Eureka (1985)	75.0	32.7
Eureka (1990)	83.0	24.4
Eureka (1996)	87.3	15.9

Source: Summary of NCUAQMD Air Monitoring Data, June 1997.

All values are in ug/m³ = micrograms per cubic meter.

* The 1990 measurement in Arcata was part of a special purpose study performed by the state.

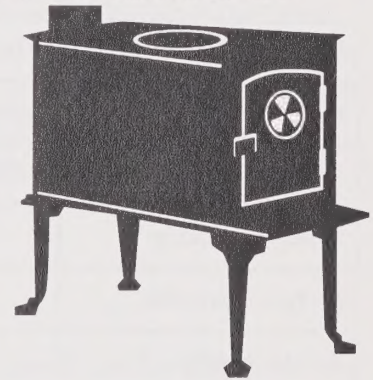
While the values shown in Table AQ-2 do not indicate that Arcata or Eureka always exceed state standards, the NCUAQMD as a whole has a non-attainment classification and all communities within the district contribute to that status.

Primary sources of PM-10 contributors in the Arcata/Eureka area include residential fuel combustion (24%); industrial wood and paper manufacturing (19%); paved road dust (16%);

construction and demolition (14%); and unpaved road dust (7%). During periods of high PM-10 releases, wood-burning fireplaces account for approximately 50%, automobiles 31%, pulp mills 14%, and other sources 5%. Table AQ-3 shows general overall sources of pollution by major category, and the percent contribution of each source to the various pollutants.

The last district study conducted by the NCUAQMD was the Chemical Mass Balance Study of Composition of Particulate Matter, in 1992. That study did find that diesel emissions constituted a fairly large component of PM-10. Diesel emissions have been declared a toxic emission by the State, and the State Air Resources Board is instituting a diesel engine replacement/retrofitting program.

Measurements indicate that the Eureka area has the greatest measured PM-10 concentrations in the Humboldt Bay area of the NCUAQMD. While the Eureka area air quality is improving, several days during the winter months still exceed state PM-10 standards. District-wide, the number of days which exceed standards have decreased from about 24% in 1985 to about 8% in 1993; 3% in 1994; 2% in 1995; 3% in 1996; and 2% in 1997. This represents a 92% decrease over the past twelve years. The months with highest PM-10 concentrations are December, January and February due to meteorological conditions² and increased use of wood burning stoves and fireplaces.



Although air quality is improving, air quality is only measured on 1/6 of the days in the year. The general criterion for non-attainment is one exceedance of the standard during a calendar year. Generally, the NCUAQMD must record no exceedances for three consecutive years to be considered in attainment for pollutants.

Significance criteria for air contaminants. The NCUAQMD publishes significant emission rates for stationary sources of air contaminants (Regulation I, Rule 130). Emissions are considered significant (defined in terms of tons emitted per year) if a new or modified stationary source exceeds the values shown in Table AQ-4. There are no established significance criteria for mobile sources of emissions, but large projects (such as residential subdivisions and shopping centers) can be compared with stationary source criteria to identify the cumulative impacts of many mobile sources such as motor vehicles.

North Coast Unified Air Quality Management District PM-10 attainment plan. As required by the California Clean Air Act, the NCUAQMD adopted an attainment plan in 1995 to identify major PM-10 sources and develop and implement control measures to meet state ambient air quality standards. The NCUAQMD's attainment plan established goals to reduce PM-10 emissions and eliminate the number of days in which standards are exceeded. Exceptions are made for uncontrollable events such as wildfires, structure fires,

and unusually high winds. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use, and burning. The table below identifies the categories of measures included in each control strategy. The draft PM-10 attainment plan developed by the North Coast Unified Air Quality Management District was adopted May 11, 1995.

TABLE AQ-3 EMISSIONS SOURCES AND CONTRIBUTION TO VARIOUS POLLUTANTS

SOURCE TYPE	EXAMPLES OF EMISSION CONTRIBUTORS				
Industrial	pulp mills, sawmills, power plants, other heavy industry				
Commercial	gas stations, restaurants, dry cleaners, body shops, etc.				
Residential	home heating, residential open waste burning, solvent/ paint use, lawn equipment etc.				
Mobile	cars, planes, trains, road dust and other transportation sources				
Agriculture and Forestry	forest management burning, field burning, herbicide use, etc.				
POLLUTANTS	INDUSTRIAL	COMMERCIAL	RESIDENTIAL	MOBILE	AGRICULTURAL
Nitrogen Dioxide	17.2%	1.0%	3.0%	78.8%	0%
Carbon Monoxide	7.1%	2.0%	4.1%	46.9%	39.8%
Sulfur Dioxide	59.0%	1.0%	1.0%	39.0%	0%
PM-10	13.1%	7.1%	6.1%	58.6%	15.2%
Total Organic Gases	7.1%	47.5%	6.1%	30.3%	9.1%

TABLE AQ-4 SIGNIFICANT EMISSION RATES FOR STATIONARY SOURCES (TONS/YEAR)

CONTAMINANTS	TONS PER YEAR
Carbon Monoxide	100
Nitrogen Oxides	40
Sulfur Dioxide	40
Particulate Matter	25
PM-10	15
Ozone	40
Various Other Contaminants [1]	0.0004 to 10

Source: Regulation I of the NCUAQMD, Rule 130-Definitions

[1] Other contaminants include lead, asbestos, beryllium, mercury, vinyl chloride, fluorides, sulfuric acid mist, hydrogen sulfide, and reduced sulfur compounds. Contact NCUAQMD for detailed information on emission rates and significance criteria.

TABLE AQ-5 NCUAQMD CONTROL MEASURES

CATEGORY	CONTROL MEASURES
Transportation	Public transit, rideshare programs, park and ride lots, vehicle buy back and smoking vehicle programs, traffic flow improvements, bike routes.
Land Use	Pedestrian and transit oriented development, walkable communities, integration of land use and transportation planning.
Burning	Residential open waste burning restrictions, conventional fireplace replacements, improved woodstoves, new development requirements, woodstove curtailments on high smoke days, education, and home weatherization.

The control measures described above are included in the NCUAQMD's PM-10 Attainment Plan and provide additional measures to reduce air pollution emissions. The NCUAQMD has existing control measures for commercial, non-residential burning, industry, forestry and agricultural burning, and construction. These measures are not included in the attainment plan because emissions reductions resulting from them are already reflected in the air quality monitoring. This element's objectives and policies include many of the NCUAQMD PM-10 Attainment Plan's control measures, particularly for transportation and land use planning.

Guiding Principles and Goals.

- A. Reduce motor vehicle related air pollution.
- B. Participate in regional efforts to improve air quality.
- C. Educate the community about effects of air pollution and how it can be reduced.
- D. Reduce emissions from wood-burning stoves and fireplaces.
- E. Reduce emissions from forest management and burning.
- F. Reduce emissions from industrial sources.
- G. Reduce emissions from residential open waste burning.

4.8 POLICIES

The Air Quality Element includes the following policies:

- AQ-1 Reduce Point and Area Sources of Air Pollutants
- AQ-2 Reduce Mobile Sources of Air Pollutants
- AQ-3 Regional Air Quality Standards, Monitoring, and Education
- AQ-4 Odor

POLICY AQ-1 POINT AND AREA SOURCES OF AIR POLLUTANTS

Objective. Improve air quality by reducing emissions from stationary point sources of air pollution (e.g., equipment at commercial and industrial facilities), and stationary area sources (e.g., wood-burning fireplaces and gas powered lawn mowers) which cumulatively emit large quantities of emissions.

AQ-1a **Reduce emissions from stationary point sources: commercial and industrial.**

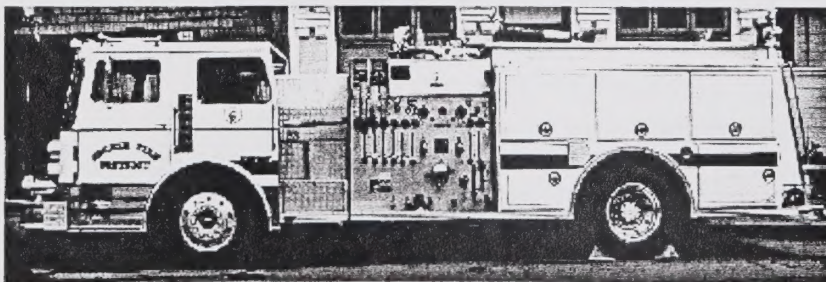
Coordinate with energy providers to develop incentive programs encouraging the use of less polluting, energy efficient designs and equipment in commercial and manufacturing uses. Encourage commercial and industrial uses to self-enforce emissions reductions by maintaining and repairing equipment, correcting leaks, installing control devices, and minimizing accidental releases. Coordinate with NCUAQMD to establish buffer zones between point sources and the public, particularly sensitive receptors such as schools, hospitals, and convalescent facilities.

AQ-1b **Reduce emissions from stationary area sources: residential, commercial, and industrial.**

Limit wood-burning fireplace installations in new construction to low - emitting, State and EPA certified fireplace inserts or woodstoves, pellet stoves, or natural gas fireplaces. New construction retrofits must comply with energy efficient construction codes to reduce energy consumption including high efficiency windows, water heaters, and furnaces.

AQ-1c **Coordination between NCUAQMD and Arcata Fire Protection District.**

Arcata Fire Protection District officials shall coordinate with the NCUAQMD to develop procedures for identifying, monitoring, and informing the public of high pollutant incidents related to fires and accidental or intentional releases of toxic or unknown materials. Coordination should encompass current air quality levels, meteorological conditions (stagnant air), prevailing wind directions, location of nearby sensitive receptors, potentially affected land uses, and types of potential toxic materials. Coordination and required permits are particularly important during the planning and implementation of controlled burns.



AQ-1d Review of development projects for emissions reductions. Evaluate new construction plans to reduce point and area sources of pollution. Consult with the NCUAQMD during the environmental review process to ensure that:

1. Air quality impacts of development projects are assessed using analytical methods and significance criteria for emission rates approved by the NCUAQMD.
2. Air quality mitigation is feasible, workable, monitorable, and cost effective.
3. Impacts of projects that may be individually insignificant, but cumulatively significant are minimized or mitigated.
4. Innovative measures are incorporated into the project design to reduce air quality impacts.

Encourage the NCUAQMD to enforce these measures and their related policies.

POLICY AQ-2 MOBILE SOURCES OF AIR POLLUTANTS

Objective. Improve air quality by reducing emissions from transportation sources, particularly motor vehicles, and other mobile sources. Reduce vehicle miles of travel and encourage shifts to alternative modes of travel.

AQ-2a Implement land use measures to reduce vehicle trips, miles traveled, and air pollutant emissions. Implement or encourage the land use and development measures which reduce motor vehicle travel as outlined in the Transportation Element. These measures are also effective in reducing mobile sources of air pollutants.

AQ-2b Implement transportation measures to reduce vehicle trips, miles traveled, and air pollutant emissions. Implement or encourage the following measures to reduce vehicle miles traveled and provide alternatives to the single occupant motor vehicle, as outlined in the Transportation Element.

1. Provide as direct and safe a travel route as possible for all travel modes.
2. Implement and support public education programs explaining the negative impacts of single occupant vehicle use, and encourage the development of employer-based measures to reduce employee automobile travel.
3. Require A&MRTS and encourage other fleet operators to convert vehicles to run on less polluting alternative fuels at the earliest feasible time (See Policy RC-8a).



AQ-2c Reduce or minimize the creation of “hot spots” or localized places of concentrated automobile emissions. Implement or encourage the following measures to reduce hot spots, which occur where groups of vehicles are required to idle (e.g., at congested intersections, driveways and drive-through facilities).

1. Minimize the delay and congestion at unsignalized and signalized intersections to reduce emissions from idling vehicles. Attempt to achieve this through reducing automobile travel, minor capacity improvements, or fine-tuning of intersection operations. Discourage major capacity improvements at intersections, minimize new signalized intersections, or any other improvement which discourages walking, bicycling, or transit use.
2. Minimize or restrict land uses with drive-through facilities located in areas of concentrated traffic or near congested intersections.
3. Construction of projects with large parking lots or high volume driveways shall identify traffic impacts and provide evidence that project design will optimize internal circulation and minimize delay. Ensure that mitigation measures balance the needs of automobiles, pedestrians, bicyclists, and transit riders.

AQ-2d Design Arcata’s highest traveled arterials to minimize stopping. Recognize that automobiles are most efficient and less polluting at constant, moderate speeds between 25 and 35 miles per hour. Minimize idling delay, excessive congestion, and excessive speeds with the following measures:

1. Encourage Caltrans to coordinate traffic signals on Samoa Boulevard to maximize progression.
2. Eliminate traffic bottlenecks with traffic flow improvements (such as re-allocating turning lanes, or converting all-way stop control to roundabouts or two-way stop control), without impacting the safety of pedestrians, bicyclists, or transit facilities.
3. Review access plans for commercial driveways to ensure designs minimize idling vehicles and concentrations of traffic. For larger projects require multiple driveways rather than single driveways and consider turn restrictions where delays to existing driveways could be significant.
4. Encourage and support law enforcement’s efforts to expeditiously manage traffic incidents.



AQ-2e Recognize that poor air quality is caused by the combination of high pollutant emissions and meteorological conditions which do not allow for dispersal of pollutants. The City shall coordinate a joint effort with the NCUAQMD to minimize the impact of high pollutant incidents and notify the public about meteorological conditions that contribute to poor air quality. The joint effort shall include employing the following measures:

1. Implement added air pollution control measures during predictable meteorological events of stagnant air. Inform the public of high pollutant incidents and encourage measures which minimize impacts, such as limiting use of wood-burning fireplaces, gas powered equipment, and avoiding non-essential vehicle travel.
2. Promote and encourage employer-based Transportation Demand Measures (such as subsidized bus fare, flexible work hours, and incentives to carpool) to reduce automobile travel, particularly during periods of poor air quality.
3. Support and encourage local industrial and commercial efforts to reduce emissions and particulate pollution from industrial plants and trucks, particularly during periods of poor air quality.
4. Require traffic and construction site dust control measures at construction projects. Require measures which reduce emissions from construction activity and maximize efficiency of traffic flow during inversion conditions.

AQ-2f Enforce air quality control measures and monitoring at construction sites.

Construction emissions shall be controlled because, although they are temporary in nature, they can often be the greatest air quality impact of a project. Require the following control measures for construction activities when necessary:

1. Water all active construction areas twice per day and use erosion control measures to prevent water runoff containing silt and debris from entering the storm drain system.
2. Cover trucks hauling soil, sand, and other loose material.
3. Pave, water, or apply non-toxic soil stabilizers on unpaved access roads and parking areas.
4. Sweep paved access roads and parking areas daily.
5. Sweep streets daily if visible material is carried onto adjacent public streets.

For larger construction sites (four acres or greater) require the following measures when necessary in addition to those above:

6. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
7. Enclose, cover, water, or apply non-toxic soil binders to open materials stockpiles.
8. Limit traffic speeds to 15 mph on unpaved access roads.

9. Install erosion control measures to prevent silt runoff onto public roadways.
10. Replant vegetation in disturbed areas within 30 days after project completion.

For construction sites near sensitive receptors, require the following measures when necessary, in addition to those above:

11. Install wheel washers for exiting trucks, or wash all equipment leaving site.
12. Install wind breaks, or plant trees/vegetation at windward sides of construction areas, or avoid removing existing vegetation which acts as a windbreak.
13. Suspend excavation and grading activity when winds exceed 25 mph.
14. Limit area subject to excavation, grading, and other construction activities at any one time.

AQ-2g Enforce air quality control measures and monitoring for agricultural operations.

Air emissions from agricultural operations, including field burning, airborne soils, and over-spray from herbicide applications, shall be controlled and monitored through air quality standards as well as adherence to the Land Use Code.

POLICY AQ-3 REGIONAL AIR QUALITY STANDARDS, MONITORING AND EDUCATION

Objective. Participate in regional efforts to improve and monitor air quality and meet air quality goals, coordinate transportation and land use development planning with the North Coast Unified Air Quality Management District, and educate the public.

AQ-3a Air quality standards and monitoring. Identify potential emission sources of airborne toxins from mobile and stationary sources. This may be in coordination with the California Air Resource Board and the NCUAQMD, as appropriate. Enforce rigid high standards to restrict fumes, smoke, dust, or other environmental pollutants from stationary sources of pollution.

AQ-3b Develop and distribute material to educate the public on air quality issues. Work with Humboldt State University, the California Air Resources Board, and the NCUAQMD to develop educational material regarding air quality, impact of air quality on people, plants and animals, and what citizens can do to improve air quality. The City will make this information available.

AQ-3c Cooperation in enforcement activities and programs. Cooperate with the NCUAQMD in implementing and enforcing the district's rules and programs. Consider joint implementation of programs between the City and the district such as:

1. A voluntary wood-burning-devices dryness certification program.
2. Free cordwood moisture checks.

3. Brochures on wood burning.
4. Conversion of conventional wood burning devices to EPA certified devices.
5. Use of district non-compliance funds for low-cost replacements.

Develop stricter ordinances, guidelines, and development agreements for new residential development to limit wood burning devices. Use district techniques to identify improper wood burning device use, improperly dried fuel, and faulty equipment, and provide education to violators or take enforcement action.

AQ-3d **Indoor air pollution.** Factors such as sealed building interiors, inadequate ventilation, non-openable windows, and use of building materials that release toxic substances contribute to indoor air pollution. To maximize indoor air quality, the installation of openable windows and adequate ventilation systems, the use of pollution-reducing houseplants, as well as the selection of non-toxic building materials and interior finishes, is encouraged in all new buildings and in the retrofitting of existing buildings. The City shall maintain a list of non-toxic building materials and interior finishes, provide available information about building techniques and designs that reduce or eliminate indoor air pollution, and encourage a good-faith effort by private industry to use those materials and techniques.



POLICY AQ-4 ODOR

Objective. Minimize public exposure to noxious odors from industrial, manufacturing, processing, and food and beverage production operations.

AQ-4a **Odor controls.** Identify potential sources of noxious odors and regulate those sources to avoid adverse affects on adjacent sensitive receptors. Noxious odors are defined as foul smelling airborne emissions that are sufficiently concentrated to cause physical discomfort to those inhabiting adjacent areas. Regulations imposed to reduce effects of these odors shall include limiting hours for odor emissions, periodic monitoring, and filtering to reduce concentrations.

4.9 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
AQ -1	Air quality education and air emissions reduction programs Continue monitoring local air quality and setting high standards for air quality. The City, including the Fire Department, shall work with the NCUAQMD to establish an air quality monitoring station in Arcata.	NCUAQMD	On-going
AQ -2	Funding sources for wood-burning appliance retrofits for low income and elderly Research and apply for grant funding for qualifying low-income and elderly households to retrofit wood-burning appliances that have high emission rates.	Community Devel. Dept.	On-going

Endnotes

1. For further information on the health effects of PM-10 see the California Air Resources Board publication "Facts about Air Pollution and Health" (ARB Publications Department); the EPA document National Air Quality and Emissions Trends Report (EPA Office of Air Quality Planning and Standards, Research Triangle Park, NC); the Air Resources Board December 1982 publication California Ambient Air Quality Standards for Particulate Matter (PM-10); Federal Register Vol. 62, No. 138, 1997 for information on PM-2.5; and Health & Environment Digest Vol. 10, No. 4 "Airborne Particulates: A Deadly Public Health Concern."

Chapter 5

Design and Historical Preservation

**Design Element
Historical Preservation Element**



DESIGN ELEMENT

Preface

The Design and Historic Preservation Design Elements are not mandated under the state planning law. They are included in the Arcata General Plan because the issue of community appearance and livability is important to Arcata. In addition to addressing community-wide design features and criteria, the Design Element also is important for protection of scenic and visual qualities of the City and the coastal zone as required by the California Coastal Act of 1976.

5.1 INTRODUCTION

Overview of Arcata's Design Character. The city of Arcata is located in a setting of great natural beauty. A sense of physical and visual separation from other communities is provided by extensive open space lands which surround the city. These include Arcata Bay, marsh lands, and agricultural lands to the south; the agricultural lands of the Arcata Bottoms to the west; the Mad River and its agricultural floodplain to the north; and forested hills to the east. For residents and visitors alike, the aesthetic encounter with the landscape of the North Coast is presented along the State Route 101 corridor and several other principal roadways. From the south, the State Route 101 parallels and provides scenic views to the marshes and open waters of Arcata Bay to the west and agricultural land with a forested coastal foothill backdrop to the east. The sense of scale and "fit" of the Arcata townscape complements this scenic rural coastal environment.



The overall urban form of the city consists of a dense and compact urban core centered around the Plaza and downtown, with a series of varied and dispersed residential neighborhoods extending into the hills and bordering agricultural areas. These provide residents with a range of housing environments and an immediate relationship to natural areas. Several interspersed agricultural areas

accentuate the juxtaposition of town and country. Much of the character of Arcata is derived from the architectural styles of its buildings, particularly of older historical residences and commercial buildings near the City's center. For the most part, buildings are small in scale and only a few buildings are three stories or more in height.

Guiding Principles and Goals.

- A. Promote orderly and harmonious development of the City.
- B. Assure that new development is designed to preserve important natural features and scenic resources.
- C. Promote building designs that are well suited to their functions and sites.
- D. Prevent excessive and unsightly grading of hillsides associated with development.
- E. Create visual environments which are of high aesthetic quality and variety.
- F. Achieve maximum benefit from natural environmental settings.
- G. Assure that new buildings are designed to fit appropriately with the existing neighborhood context.
- H. Promote stability of land values and desirability of investment in the City.
- I. Incorporate “green building” concepts and features into new and renovated structures.

5.2 POLICIES

The Design Element contains the following policies:

- D-1 Overall Community Character
- D-2 Downtown Arcata Design
- D-3 Scenic Routes, Resources, and Landscape Features
- D-4 Subdivision Design
- D-5 Residential Design
- D-6 Design of Commercial and Industrial Development
- D-7 Landscape Design

POLICY D-1 OVERALL COMMUNITY DESIGN CHARACTER

Objective. Maintain a community with diversity and quality in the built environment; with small-scale structures that are harmonious with their neighborhood context; and with a sharp physical and visual distinction between the urban area and the surrounding open space lands.

- D-1a **Maintain small scale of building.** Buildings shall be designed to maintain the small-scale character of the community.
- 1. This may be accomplished by breaking larger developments into several smaller buildings rather than constructing a single large, monolithic building.
 - 2. This shall be accomplished by avoiding large, unbroken expanses of wall and roof planes.
 - 3. This shall be accomplished by providing articulation in building mass, surfaces, rooflines, wall planes, and facades, and including architectural ornamentation.

- D-1b **Emphasize Arcata Plaza area as the main community focal point.** Buildings fronting on streets around the Arcata Plaza shall be multi-story. Architectural and other design elements shall emphasize the importance of the Arcata Plaza as the community's main focal point for commerce, entertainment, and special events. Designs shall promote pedestrian access and continuity of retail space at the street level. Parking should be accommodated off-site to the extent practicable.



- D-1c **Promote quality and diversity of design compatible with neighborhood context.** Site and building design shall be harmonious with the neighborhood context, including existing structures. Within new subdivisions, diversity in building appearance rather than repetitive designs is encouraged.
- D-1d **Preserve natural landforms and landscape features.** Site designs shall have the minimum disturbance necessary to natural conditions such as existing contours and vegetation, and shall preserve, to the maximum extent practicable, any unusual natural features.
- D-1e **Promote energy efficiency and solar access.** Site and building design shall emphasize energy efficiency and solar orientation.
- D-1f **Create buffers between incompatible land uses.** At boundaries between different land-use designations, and where different and incompatible land-uses are adjacent, buffer areas shall be incorporated into site design for new development. Buffers may consist of additional setbacks, landscaping, and visual and noise barriers such as fences or walls.
- D-1g **Provide for bicycles, pedestrians, and transit in design.** Design of commercial, industrial, and multi-family housing shall incorporate provisions for bicycle and pedestrian circulation, and bus transit. Facilities should be located and designed so that these alternative travel modes are fully interconnected.
- D-1h **City edges.** The development pattern shall be managed to retain the sharply demarcated physical and visual separation of Arcata from the urbanized areas of Eureka and McKinleyville. This shall be accomplished by:

1. Restricting development in surrounding open space lands to very low density (minimum parcel size from twenty to sixty acres).
2. Requiring that construction in hillside areas shall be sited so that it does not intrude above the ridgeline.
3. Retaining existing vegetation, providing landscape screening, and shielding exterior lighting to minimize visible impacts of any development on prominent sites or in open space areas, especially hillside sites visible from State Route 101.

D-1i **Renewable green building.** Site and building design shall incorporate green building concepts including maximizing use of recycled materials and recycling, energy efficiency, solar access, insulation, energy efficiency, use of toxic-free materials, natural lighting, native landscaping, permeable surfaces around structures, and minimizing construction waste generation.

POLICY D-2 DOWNTOWN (CENTRAL – COMMERCIAL) DESIGN

Objective. Maintain and continue to develop a built environment which accentuates the Plaza and surrounding downtown lands designated in the Commercial-Central use category as the commercial and cultural hub of the city, maintains the historical flavor of building and site design, integrates bicycle and pedestrian facilities, and which incorporates appropriate trees and other "softscape" elements.

D-2a **Design of Arcata Plaza.** The basic historical pattern or design of the Plaza shall be retained, including the symmetrical arrangement of pathways, the open expanse of lawn, and the central focal point of the McKinley statue.

D-2b **Streetscape design.** Future changes to public street rights-of-way in the downtown shall focus on improving amenities and safety for pedestrians, bicycles, and reasonable and safe vehicle access. The following design features should be considered in future improvement projects:



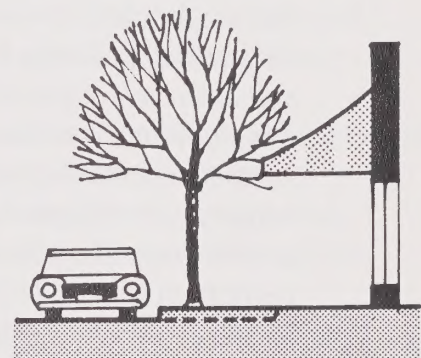
1. Increase the width of sidewalks.
2. Demarcate pedestrian crosswalks with pavement marking or special paving materials or colors.
3. Provide or improve bike lanes, where appropriate.
4. Incorporate street trees in appropriate locations.
5. Use special paving materials or patterns for sidewalks at key locations or intersections.

6. Provide landscape screening between parking lots and the street.
7. Provide street and parking lot lighting that is adequate for safety but that is not overly bright.
8. Establish a uniform lighting fixture and post (or pole) design for streetlights;
9. Establish a uniform design for various items of "street furniture," such as benches, trash receptacles, water fountains, etc.
10. Require undergrounding of utilities and elimination of poles and overhead wires.

D-2c **Alleys.** The existing alleys in the downtown shall be retained and should be improved as multi-functional accessways. Businesses are encouraged to use alleys for secondary entries. Enhancements should emphasize amenities and safety for pedestrians, such as improved surfacing, lighting, landscaping, and enclosures for garbage and recycling receptacles where space permits.

D-2d **Street trees.** The City shall encourage the installation of street trees within the downtown area. The City shall develop a comprehensive street tree planting and maintenance program which includes the following components:

1. Identification of streets where trees may be installed.
2. Standards for the location of street trees; generally, locations will either be in wells located between on-street parallel parking areas, in cutouts within the sidewalk where the sidewalk is of sufficient width (7 feet or more), or in containers where the preceding locations are not workable.
3. Standards for spacing between street trees (usually 20 to 35 feet on center).
4. Specification of a list of acceptable tree species and the appropriate streets and locations for each species.
5. Standards for size of trees and specifications for their installation (e.g. size of well, staking, materials).
6. Identification of responsibilities, procedures, and standards for tree maintenance. Where space is insufficient for street trees, trees may be incorporated into the landscape design on private property adjacent to the street property line.



D-2e **Design criteria for new structures and additions.** The height, scale, and mass (volume) of new buildings and additions to existing buildings shall be compatible with other buildings in the immediate vicinity. Each building shall have an entry from the sidewalk to the street-level floor. Building elevations shall be articulated: long, continuous, unbroken wall and roof planes should be avoided. The visual organization and proportions of building elevations — including the size, spacing and shape of window and door openings — should be consistent with neighboring

buildings. Architectural detailing and ornamentation, such as cornices, eaves, recessed or covered entryways, and awnings, are encouraged. Design review applications shall include depiction of buildings on adjoining lots, either in elevation drawings or photographs.

D-2f Design criteria for vacant lots on Arcata Plaza. In addition to the criteria in D-2e, the following criteria shall also apply to development on vacant parcels with frontage on streets surrounding the Plaza:

1. All buildings shall have a minimum height of two stories to create a sense of enclosure for the City's central open space and focal point.
2. All floors of buildings should be parallel to and at the street parcel line.
3. Any building located at a corner or intersection shall incorporate architectural features at the ground floor which emphasize pedestrian circulation, such as building cut-offs, walk-through arcades, pedestrian spaces, or similar elements.
4. Parking is encouraged to be provided off-site; if any on-site parking is provided, it shall be accessed from the rear.
5. Loading docks shall not be required.



D-2g Design criteria for remodeling existing facades (storefronts). In remodeling facades, the distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features shall be avoided whenever possible. Deteriorated architectural features shall be repaired rather than replaced whenever practicable. Storefronts shall be designed to fit inside the original opening and not extend beyond it. Contemporary design for alterations and additions to existing structures shall not be prohibited when such alterations and additions do not destroy significant historical or architectural character of the property. The size and proportions of any additions shall be compatible with the original building.

D-2h Site design, including parking areas. The placement of new buildings and building additions on a site should be compatible with site layout on neighboring properties. In general, buildings should be sited immediately adjacent to the sidewalk and any onsite parking should be placed to the rear of the building. Parking areas shall be separated from the street and sidewalk by a landscape buffer of at least six feet. Trees that reach a mature height of at least twenty feet should be included in the

interior of all parking lots with more than two parking spaces. Pedestrian spaces, circulation areas, or gathering areas are encouraged as design elements.

- D-2i **Design of signs.** Permanent signs in the Central-Commercial area shall be oriented to pedestrians rather than automobile traffic, and shall conform to the following criteria:
1. Signs shall be placed so that they do not obscure other building elements such as windows, cornices, or decorative details.
 2. Size, materials, style, and color shall complement the building facade and shall be compatible with the surrounding area.
 3. Copy shall be limited to icons, logos, business identification, and hours of operation (rather than advertising copy).
 4. Flush-mounted signs with copy in a specifically designated horizontal band is the preferred type; monument and hanging (cantilevered) signs may be allowed, provided that the latter has a vertical clearance of at least 7.5 feet and an encroachment permit is obtained.
 5. Pole signs shall be prohibited, except for public traffic, directional and safety signs.
 6. When lighted, signs shall be designed to minimize glare and with the minimum amount of illumination necessary to make the sign legible; neon signs with distinctive designs are acceptable. Plastic-faced internally lit signs should be discouraged.
 7. At the time of any future alterations of an existing sign, the sign shall be required to be modified to conform in its entirety to these policies. Alterations shall mean any change to the structure, area, or height of a sign, but shall not mean a change in copy.

- D-2j **Incorporation of amenity features in new development.** Any new development shall incorporate an appropriate combination of project enhancements in lieu thereof. Potential enhancements include, but are not limited to, the following:

special paving materials in parking lots
public art, including sculpture and murals
outdoor spaces for public use
street trees or street furniture
fountains or other water features
secondary pedestrian access from alleys
balconies or decks on upper floors
sidewalk and/or entry mosaics or decorative tile

special architectural features
flower beds
window boxes
courtyards
awnings
planted wall trellises
recessed entryways

POLICY D-3 SCENIC ROUTES, RESOURCES, AND LANDSCAPE FEATURES

Objective. Identify and protect scenic routes, resources, and landscape features. Retain natural features, coastal scenic resources, and scenic vistas as important aesthetic components of the built environment and visual and associative links to nature. Minimize impairment and obstructions of scenic views to the minimum necessary to allow reasonable development.

D-3a Designation of coastal scenic highways. The following coastal scenic highways are hereby designated:



1. 7th Street and Bayside Road, from 7th Street overcrossing to Crescent Drive
2. Bayside Cutoff, from State Route 101 to Old Arcata Road
3. Old Arcata Road, from Bayside Cutoff to Crescent Drive
4. Samoa Blvd. (State Route 255), from Crescent Drive to Manila
5. Janes Road, from 11th Street to Foster Avenue
6. State Route 101, from the southerly City boundary to the Mad River
7. South "I" Street, from Samoa Blvd. south
8. South "G" Street, from "H" Street to State Route 101
9. All public roads west of the City in the Arcata Bottom

D-3b Designation of non-coastal scenic highways. The following non-coastal scenic highways are hereby designated:

1. Fickle Hill Road
2. Jacoby Creek Road
3. Golf Course Road
4. L. K. Wood Blvd. from the St. Louis Road Overcrossing to 14th Street

D-3c Design policy for projects affecting scenic highways. The following standards shall apply to any development which affects scenic highways:



1. Billboards or other off-premises signs are prohibited.
2. Landscape planting along State Route 101 shall not interrupt scenic views to the bay or eastward across agricultural lands.
3. New development or redevelopment in the industrial area of South "G" Street shall provide dense landscape screens along all perimeter lot lines visible from State Route 101.
4. The City shall work jointly with the County of Humboldt, Caltrans, and the Coastal Commission to enhance scenic views along scenic highways, particularly State Route 101 and 255 corridors.

D-3d **Scenic entryways.** The appearance of the following additional entryways should be enhanced with appropriate landscaping and entry signs or structures:



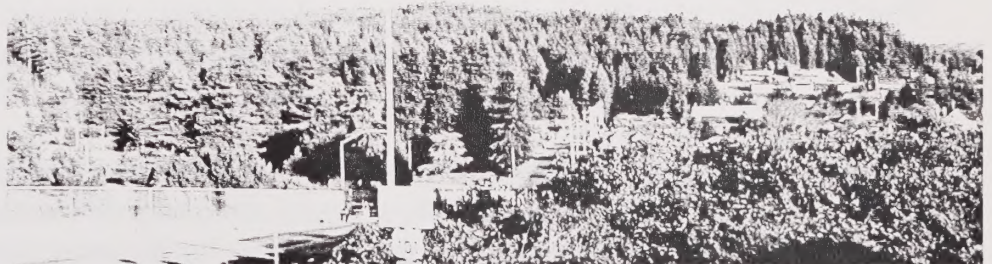
1. Samoa Blvd. (State Route 255) between Jackson Ranch Road and "K" Street
2. State Route 101 between Bayside cutoff and Samoa Blvd.
3. State Route 101 between the Mad River and Giuntoli Lane
4. State Route 299 from North Bank Road to Giuntoli Lane
5. Old Arcata Road from Bayside Cutoff to Jacoby Creek Road

These public improvements may include uniform landscaping, pedestrian enhancements, and directional signing.

D-3e **Arcata Bay—Open waters, shoreline, and tidal marshes.** Proposed land uses and development shall not significantly alter the natural appearance or landforms of the waters, shoreline, and tidal marshes of Arcata Bay, which are designated in the natural resource land-use category. Where these resources are visually degraded, developments shall be required to restore or enhance their appearance. Development within the area bounded by Samoa Blvd., Butcher's Slough and Cannon Slough shall include local native plant landscaping, screenings and other measures to ensure compatibility with scenic coastal resources and with the educational, recreational, wildlife and other uses of the Humboldt Bay National Wildlife Refuge and the Arcata Marsh and Wildlife Sanctuary.

D-3f **Bay and ocean views.** Views of Arcata Bay and the Pacific Ocean from vantage points along public streets in hillside areas of Arcata shall not be blocked by development. Any impairment or partial obstruction of these ocean views from new development shall be the minimum necessary to allow reasonable development.

D-3g **Wooded hillsides.** Views of wooded hillsides forming the City's eastern edge from vantage points along public streets west of the State Route 101 should not be blocked by development.



D-3h **Farmlands and open countryside.** Views of farmlands and open countryside — in the Arcata Bottom, along the State Route 101 south of Samoa Boulevard, north of Giuntoli Lane, and along State Route 255 west of the city, should be protected. New



development should be sited and designed to minimize any impairment of such views.

D-3i **Preservation of hedgerows (windrows, or rows of trees).** Preservation of the following windrows, hedgerows, or groves of trees shall be encouraged:

1. The cypress windrows separating Arcata Heights from the Sunset neighborhood.
2. The trees along the north and western edges (Alliance Road) of the Sunset neighborhood.
3. The trees on the small knoll adjacent to State Route 101 south of Spear Avenue.
4. The windrow of trees adjacent to the west side of the State Route 101 between 7th and 14th Streets.
5. Windrows in the Arcata Bottom.
6. The row of trees along the westerly side of State Route 101 at the State Route 299 interchange.
7. The groves of eucalyptus and other trees which line Bayside Road between Union Street and Crescent Way.
8. The elm trees on "J" Street between 14th and 16th Streets.
9. Redwood Grove at 7th and Union, and Bayside Road to be left intact.

D-3j **Streamside riparian areas.** Creeks or drainage channels and any associated riparian vegetation shall be retained in a natural state and incorporated into site design as a visual asset to development which adjoin them.

POLICY D-4 SUBDIVISION DESIGN

Objective. Achieve subdivision design which accommodates orderly growth; assures proper development of land and access to lots; promotes open space retention; insures adequate circulation, utilities, and services; preserves existing landforms; and retains significant vegetation.

D-4a **Design of roadways and subdivision improvements.** New subdivisions shall comply with the following criteria:

1. Unless it is demonstrated to be infeasible, all new lots shall have frontage on a public street or improved alley. Where direct access is infeasible, the number of lots or units to be served by a common access driveway easement shall be based on accessway design meeting all, but not limited to, these requirements: public safety access, ingress, egress, parking, utilities, drainage, and environmental issues.
2. The arrangement of proposed streets shall conform to the Transportation Plan, where possible. When not shown on the Street Plan, the design shall provide for the appropriate connections to existing streets. Cul-de-sacs should be avoided where possible.

3. The subdivision design may utilize narrow or "skinny" streets and various traffic calming approaches; alleys are encouraged for access to garages.
4. Gated subdivision streets shall be prohibited in order to maintain a sense of community.
5. Use of natural drainage techniques in subdivision design is encouraged. In general, curbing and gutters are appropriate for street drainage, safety and delineation and protection of pavement edge. Where curbing is not required, some other type of edge definition and stabilization shall be furnished.
6. Natural drainage patterns shall be preserved to minimize potential slippage and flooding. Building site grading shall be contoured to direct water away from structures.
7. No lighting shall be allowed that results in illumination above the tree canopy.
8. Sidewalks and bikeways shall be provided; sidewalks may be furnished on one side of the street only. In planned developments, additional sidewalks and bikeways may be located away from the street.
9. Illumination of streets shall be unobtrusive and the lowest intensity compatible with safety.
10. Landscaping shall be provided as part of subdivision design; plantings shall include street trees or an equivalent number of trees planted on individual lots adjacent to the street frontage.
11. Where subdivisions abut a major street or railroad, or include more than one land-use or housing type, landscape buffers shall be included at appropriate locations to create a visual screen and minimize any adverse impacts.

D-4b **Lot patterns.** Lot boundaries should be regular in shape and lots should either have direct access to a public street or to an access easement which connects to a public street. Clustering of lots with common open space areas and/or common parking lots is encouraged.

D-4c **Grading and hillside subdivisions.** In hillside areas, subdivision design and grading shall minimize disturbance to natural landforms, not destroy visual quality, nor create conditions that could increase the risk of landslides, flooding, or erosion. Designs shall comply with the following criteria:

1. Street layout should in general be parallel to topographic contours to reduce the extent of cut and fill slopes.
2. Long, continuous, or unbroken manufactured slopes should be avoided.
3. Graded slopes should be contoured by varying slope increments and undulating banks vertically and horizontally; building pad elevations should be varied to avoid the appearance of monotonous, flat, level pads.
4. Generally, slopes greater than 2:1 (horizontal: vertical) should be avoided.

5. Permitted densities shall be adjusted in designated hillside areas such that the steeper the slope, the less the allowed density; in such areas, at least fifty percent of each new lot shall be retained as ungraded "natural area."
6. Along ridgelines, new development or lighting which would extend above the tree canopy shall be prohibited.
7. Parallel on-street parking should not be provided on steep street segments; in such areas, alternative designs for on-street parking shall be required.

D-4d Retention of natural features. Design of subdivisions shall be based upon an analysis of the natural conditions and features of the site. To the maximum extent practicable, development shall be located to preserve natural features and avoid areas of environmental sensitivity, including but not limited to: wetlands, significant or mature trees or stands of trees, creekside riparian habitat areas, floodplain areas, and areas with slopes greater than thirty percent. Residential structures, including decks and balconies, shall not extend into significant natural areas.

D-4e Open space and parks. New residential subdivisions shall either be required to dedicate land for public parks or stormwater detention facilities, provide commonly-owned and maintained park or open space lands for use by residents of the subdivision, pay a fee in-lieu thereof, or some combination of the foregoing.

POLICY D-5 RESIDENTIAL DESIGN

Objective. Create residential living environments which meet the needs of residents, are aesthetically pleasing, provide for personal safety and privacy, promote social interaction, maintain continuity with the community's past, and provide for leisure needs. Blend residential design objectives with neighborhood conservation area objectives expressed in the Historical Preservation Element.

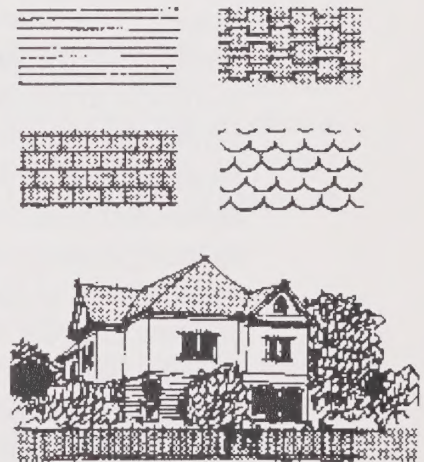
D-5a Multi-family housing design. Within each neighborhood where multi-family is allowed by the Land-Use Element, multi-unit housing designs should comply with the following criteria:

1. Buildings should maintain the scale and character of other residential structures in the immediate vicinity and avoid abrupt changes in height and bulk between structures.
2. Buildings should be grouped compactly to provide more usable open space.
3. Building elevations should be articulated and long, continuous wall and roof planes should be avoided. Architectural features such as bay windows, balconies, porches, and similar elements are encouraged.



4. Features should be incorporated into site and architectural designs which provide maximum exposure to sunlight and protection from rainstorms and other adverse climatic conditions (such as covered entryways).
5. Site and building design shall incorporate features to mitigate noise from nearby noise sources (see Noise Element).
6. Sufficient useable outdoor open space should be provided to accommodate the recreation and leisure needs of the residents, of the development, and individual households.
7. Individual units should be designed to be readily distinguishable from one another from the exterior.
8. Parking should be designed to protect the privacy of residents and prevent intrusion of noise and lights from vehicles.
9. Parking lots shall be landscaped with trees that reach a mature height of at least twenty feet and shall be visually screened from the street by solid walls, fences, or a planted landscape buffer of at least six feet in width. Site design should incorporate safety features that maintain visibility and provide security lighting.
10. Service and storage areas, such as for recycling and garbage, shall be screened by fencing or walls; appropriate landscape planting and setbacks from adjacent properties shall be provided.

D-5b Single-family residential design. The intent in single-family residential design shall be to allow maximum flexibility consistent with maintaining existing community character. Maintaining character means architectural style consistency, structures proportional to the site and surroundings, and harmony with the design of adjacent buildings. Good design respects its neighbors, is properly sited for privacy and solar access, minimizes disturbance of natural site conditions, and is landscaped to complement the streetscape, including street trees where appropriate.



Design of single-family houses on existing lots in hillside areas shall adhere to the following additional criteria:

1. Disturbance of existing landforms (cut and fill) shall be minimized.
2. Terrain-adaptive architectural designs which fit into the contour of the hillside are encouraged, including:
 - a. Reduced-footprint design with multi-level structures;
 - b. Multiple "Step-up" or "step-down" structures;
 - c. Stilt houses, with enclosure of area underneath the building.
3. Significant trees and drainageways should not be disturbed.

4. Development should be confined to portions of a site which are less steeply sloped.
5. Garages should be located under or over the structure depending on whether the lot is uphill or downhill from the street.
6. The scale and character of buildings should be matched with the terrain, scale, and character of the surrounding neighborhood.

POLICY D-6 DESIGN OF COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Objective. Create commercial centers and industrial areas which are functional, suited to the needs of the particular businesses, responsive to site conditions, and compatible with the neighborhood context.

D-6a Design of commercial development. The following criteria shall apply to design of new commercial development, except for the Plaza area (which is addressed in Policy D-2):

1. To encourage pedestrian access buildings should be sited so that entries and front facades face the public sidewalk; loading docks and vehicular entrances shall be located to the side or rear.
2. When located adjacent or near to residential areas, buildings should respect the residential character by avoiding long, uninterrupted expanses of wall and roof planes, and by incorporating architectural features such as covered entries or porches, cupolas, towers, arbors or pergolas, etc. which add variety and interest to larger buildings.
3. Pedestrians and bikes should be accommodated through appropriate location of walkways and rain-sheltered entrances to buildings.
4. Drive-through service windows for restaurants shall be restricted to the Valley West area.
5. Where commercial development abuts residential or other non-commercial uses, appropriate visual and noise buffers shall be included in the site design, such as increased setbacks or landscaped screening.
6. Service and storage areas shall be screened by fencing and appropriate landscape plantings.
7. The siting and design of buildings shall promote energy-efficiency and solar access, and shall minimize impacts on other nearby uses.
8. Parking areas are encouraged to be provided to the rear or side of buildings and include trees that reach a mature height of at least twenty feet whenever feasible.



9. Noise impacts shall be minimized through acoustical features in building design and on site sound attenuation.

D-6b Design of industrial development.

In addition to the criteria stated in Policy D-6a, the following criteria shall also apply to new industrial development:

1. Building facades that include regional materials (e.g., locally produced wood, stone and recycled products) are encouraged. Prefabricated and manufactured materials may be used only where they are compatible with surrounding development.
2. Outdoor storage areas, including storage of trucks and equipment, shall be screened from view from adjacent streets and parcels by appropriate fencing and landscaping.



D-6c Design of institutional development. Since institutional uses—such as churches, schools, government facilities, and others—are frequently located within residential areas, their design shall be reviewed for compatibility with the adjacent residential neighborhood. In addition, the City requests that HSU, school districts, and other institutional entities adhere to the following criteria, which shall apply to design of any facilities within Arcata:

1. Long, uninterrupted expanses of wall and roof planes should be avoided and architectural features which add interest and variation, such as porches, cupolas, towers, arbors or pergolas, etc., should be incorporated.
2. Appropriate buffers and screening should be provided between institutional uses and adjacent residential uses, including increased setbacks, fencing, and landscaping.
3. The massing of buildings and the visual organization of facades, including the proportion of window and door openings to total wall surface, exterior materials and colors, and architectural detailing and ornamentation, should be designed to harmonize with any adjacent residential uses.
4. Appropriate setbacks and landscaped buffers should be provided to minimize noise and visual impacts.

D-6d Design of signs. The following criteria shall apply to all signs, except those located within the Central-Commercial Area use category:



1. Signs shall be placed so that they do not obscure other building elements such as windows, cornices, or decorative details.
2. Size, materials, style and color shall complement the building facade and shall be compatible with the surrounding area.
3. Copy shall be limited to icons, logos, services identification, and hours of operation (rather than advertising copy) except as required by law or ordinance.
4. Flush-mounted signs and monument signs are the preferred types; no more than one free-standing sign may be allowed per

business street frontage (including alleys), and freestanding signs shall not exceed fifteen feet in height.

5. Pole signs are discouraged; when permitted, such signs shall not exceed fifteen feet in height.
6. Signs shall not be of a height or design which is intended to be read from the State Routes 101 or 299, except for in the commercial visitor-serving district.
7. When lighted, signs shall be designed to minimize glare and with the minimum amount of illumination necessary to make the sign legible; neon signs are acceptable.
8. All off-premises (or off-site) business identification and advertising signs are prohibited.
9. The planned sign program is encouraged whenever there are multiple businesses on a site; no more than three signs may be allowed per parcel except through approval of a planned sign program permit. The planned sign program shall require harmony in shape, placement, materials, and other appropriate design elements for all signs on the site.
10. At the time of any future alterations of a lawfully permitted existing sign, except for a change in copy, the entire sign shall be modified as necessary to conform to these policies.

POLICY D-7 LANDSCAPE DESIGN

Objective. Promote landscape designs which are appropriate for the climate zone and the specific site conditions, integrate harmoniously with the scale and architecture of buildings on the site, improve the overall aesthetic appearance of the city and its neighborhoods, and serve to protect the general safety and welfare.

D-7a Landscape plans required. A landscape plan drawn to scale shall be required for all new development subject to discretionary review by the City. The plan shall identify

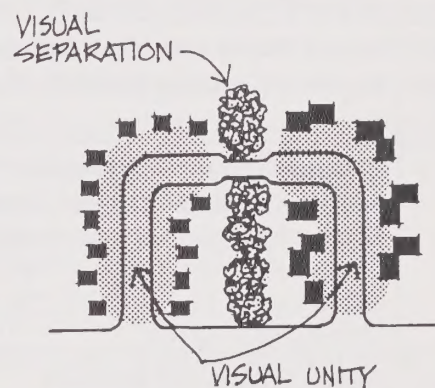
existing and proposed trees, shrubs, groundcovers, and other landscape elements. Native species are encouraged for all new landscaping.

D-7b **Planting area required.** A minimum landscape planting area shall be required in all commercial, industrial, and residential land-use zones; these shall be contained in the zoning ordinance and expressed as a percent of site area.

D-7c **Parking lot landscaping.** All parking areas, other than single family residential, containing two or more parking spaces shall be landscaped. Landscaping shall include a minimum of a six-foot wide screen or buffer between the parking area and any public street. Trees that reach a mature height of at least twenty feet shall be provided within the parking area at a ratio of one or more trees to each five parking spaces.

D-7d **Site design criteria.** Landscaping shall be an integral part of site development, connecting site design elements, enhancing the site identity, and creating a pleasing appearance. Landscape designs shall conform to the following criteria:

1. Existing natural site vegetation should be incorporated, to the extent appropriate.
2. Coverage by impervious surfaces should be minimized in order to reduce runoff.
3. Cut and fill slopes shall be landscaped for erosion prevention.
4. Landscaping should include trees adjacent to the public street right-of-way, where appropriate.
5. Consideration should be given to native plant species and to those non-invasive exotics which have demonstrated adaptability to local climate.
6. Where a development borders a major street, railroad, or different land-use type, a landscape buffer shall be provided to create a visual screen, promote privacy, and to shield the development from any adverse external effects, and to shield neighboring properties from any adverse effects of the development. The buffer may include fencing, berms, plantings, or a combination thereof. The appearance of fences from public streets should be softened with plant materials.
7. The design for a particular site should harmonize with the surrounding landscape, including the landscape design of adjacent lots.
8. Site design should incorporate safety features such as maintaining visibility and providing security lighting.



D-7e **Upgrade of non-conforming landscape.** When improvements are made to structures on sites where landscaping is non-conforming, landscaping should be required to be upgraded if feasible.

D-7f **Maintenance of required landscaping.** All required landscape plantings shall be properly maintained to assure survival; any non-surviving plants shall be replaced.

5.3 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE	RESPONSIBLE PARTY	TIME FRAME
LU-1	Design Review Standards, Sign Regulations, Language Standards (LUC Amendment) Prepare a PLUC amendment (formerly LUDG) to implement Design Element policies, including standards for review, sign regulations, landscape standards, and applicability of design review (specify when design review and approval is required).	Community Development Dept./ Planning Commission	Year 1
D-1	Design Review Commission/Project Design Review Review and approve the design of private and public projects.	Comm. Devel. Dept./ Design Review Comm.	Ongoing
D-2	Downtown Street Tree Program Prepare a street tree program consistent with the Design Element for review and recommendation by the Design Review Commission and approval by the City Council. Financial assistance may be provided by the Arcata Community Development Agency.	Public Works Department/ Downtown Business Organizations	Year 1
D-3	Design Criteria and Brochure Prepare design review brochures or handouts which explain and illustrate design criteria, standards, and procedures.	Community Development Dept./Design Review Comm.	Year 1
D-4	Design Awards Program Recognize and award projects that demonstrate the highest quality design and context.	Comm. Devel. Dept./Design Review Comm.	Ongoing
D-5	Samoa Blvd. Public Improvements Program The City of Arcata shall work to obtain funding to develop a specific public improvements program to improve the appearance of Samoa Blvd. from State Route 101 to "I" Street. These improvements may include uniform landscaping, pedestrian enhancements, and directional signing.	Public Works Department	Year 2
D-6	Design Review MOU Develop Memorandum of Understanding with other governmental agencies for design review	City/County/State agencies/Special Districts	Year 2

HISTORICAL PRESERVATION ELEMENT

5.4 INTRODUCTION

Arcata's Historical and Cultural Resources. For centuries before the arrival of European-American settlers in 1850, Arcata and the Humboldt Bay region were the home of the Wiyot. An Algonquian-speaking people, the Wiyot lived along the lower Mad River, other local streams, and along Humboldt Bay. Their way of life was shaped by the remarkable surroundings of forested hills, bountiful streams and rivers, and the Pacific and Bay shores, which generously provided for both their survival and cultural needs.

Humboldt Bay was located by European-Americans for the first time in 1849. The discovery of gold in the Trinity and Klamath River regions resulted in large numbers of settlers coming to the area. The displacement, disease, violence, and cultural disintegration accompanying white settlement brought almost total annihilation to the Wiyot peoples. Today, the Wiyots are, for the most part, associated with three Humboldt Bay area rancherias. They are involved in various tribal economic projects and in the revitalization of cultural traditions such as language, basket weaving, ceremonies, and reclaiming ancestral lands.

Arcata, first known as Union, was settled in the spring of 1850 as a supply center for the interior mining districts. The townsite at the foot of Fickle Hill was selected by the Union Company and subdivided into blocks and lots. A wharf was soon constructed into Arcata Bay with a horse-drawn railway connecting to the Plaza, where merchandising establishments supplied both the miners and growing numbers of residents.



The importance of gold, however, was soon eclipsed by lumbering. It was timber resources — particularly the vast, virgin forests of giant redwoods which covered the ridges and valleys along California's north coast — that sustained the development of Arcata through the 19th century and into the mid-twentieth century. By 1930 Arcata's population had reached 1,700 and was growing. A public water system and fire department came along in 1884, followed by the *Arcata Union* newspaper in 1886, electricity in 1895, railroad connections with San Francisco in 1914, the establishment of Humboldt State Normal School (now Humboldt State University) in 1914, and the Redwood Highway in 1925 [Susie Van Kirk: *Touring Arcata's Architecture*, 1988].

Many fine examples of both residential and commercial structures from Arcata's early history survive today. The Plaza itself, with the statue of McKinley (1906) at its center, dates from the town's beginnings, and recalls the "greens" of New England or the town squares of the south. Although none of the original 1850s buildings around the Plaza remain, a variety of classical revival and false-front buildings from the turn-of-the century survive around its perimeter. The Plaza remains the city's commercial hub to the present day. Many of the commercial buildings have been restored, best exemplified by the Jacoby Building (1857), which pioneered modern-day historical preservation endeavors in the city with its restoration in 1977.

An inventory of Arcata's historical structures and sites in 1979 [Susie Van Kirk: *Reflections of Arcata's History: eighty years of architecture*, 1979] identified four early periods of residential building styles: settlement (1850-1885) Victorian (1885-1900), Transitional (1900-1910) and Craftsman (1910-1930), in addition to the modern period (1930-present). The City's first historic preservation ordinance [Ordinance No. 935] was adopted by the City Council in 1980. Since that time, 85 structures or sites have been formally designated by ordinance as local historic landmarks. The City's Historic Landmarks, Neighborhood Conservation Areas, and Specific Plan Districts are shown on Figures HP-a and HP-b.

Guiding Principles and Goals.

- A. Promote preservation of structures and sites that are representative of the various periods of the city's social and physical development.
- B. Preserve the historical character of the Plaza and the surrounding commercial district.
- C. Encourage owners of eligible structures to seek historic landmark status and to invest in restoration efforts.
- D. Conserve the many examples of early residential building styles found in the city's older neighborhoods, from Bayside to Arcata Heights.
- E. Assure that new construction and additions to existing historically-designated buildings maintain the character and livability of the historic neighborhoods.
- F. Promote interest in and appreciation of the value of Arcata's history and its heritage of historic buildings.
- G. Encourage tourism and economic development through historic resource preservation.
- H. Prevent destruction of archaeological and cultural resources and assure that any artifacts receive proper disposition.



5.5 POLICIES

The Historical Preservation Element contains the following policies:

- H-1 Historic Landmarks
- H-2 Noteworthy Structures
- H-3 Arcata Plaza Area Historic District
- H-4 Neighborhood Conservation Areas
- H-5 Controls on Demolitions of Structures
- H-6 Public Participation, Information, and Education Policy
- H-7 Archaeological and Cultural Resources

POLICY H-1 HISTORIC LANDMARKS

Objective. Designate and preserve significant structures and sites that are representative of the city's social and physical development; that are reminders of past eras, events, and persons important in local, state, or national history; which provide significant examples of architectural styles of the past; or which are unique and irreplaceable assets to the city, and the neighborhood in which the structure or site is located.

H-1a National Register and State Historic Landmarks designations. The City encourages owners of eligible structures to request National Register and State Historical Landmarks designations for their properties. As of 1998, three National Register sites have been designated: the Arcata Hotel (on the Plaza), the Whaley House (14th and H Streets), and the Schorlig House (1050 12th Street). The Jacoby Storehouse is among the State Registered Historical Landmarks.

 **H-1b Local Historic Landmarks designations.** Structures or sites having special character or special historic, architectural, or aesthetic interest or value shall be designated as local Historic Landmarks. Such structures or sites shall be protected from demolition and inappropriate alterations. Locally designated Historic Landmarks are shown in Figure HP-a and are listed in Table HP-1, at the end of the Element. An updated inventory of structures and sites eligible for designation as a Local Historic Landmark shall be maintained by the City. One or more of the following criteria shall be required for a structure or site to be eligible for listing:

1. The building or site is particularly representative of a distinct architectural period, type, style, or way of life.
2. The building is of a type or style which was once common but is now rare.
3. The building is at least 50 years old.
4. The building or site is connected with a person or event important to local history.
5. The architect or builder is famous or well-recognized.

6. The building's style, construction method, or materials are unusual or significant.
7. The overall effect of the design or building details are beautiful or unusual.
8. The building contains original materials or workmanship of high or unusual value.

H-1c Historic Landmarks (HL) combining zone. The City shall formally designate Historic Landmarks with a special combining zone in the Land Use Code. The zone shall serve as a disclosure of the importance of the structure and of the limitations placed on its alteration or demolition. The request for designation may be initiated by the owner, City Council, Planning Commission, or the Historical Landmarks Commission. If initiated by the City, the owner shall be notified and be able to contest the process.

H-1d Discretionary review and approval requirements for demolition.
[See policy H-5].

H-1e Design review approval for alterations and additions. The following types of changes to a structure designated by the HL combining zone shall not be permitted without first obtaining approval of the Historic Landmarks Commission:

1. Any exterior modifications or alterations, including changes in materials.
2. Interior alterations that would affect the exterior appearance.
3. Any addition to the designated structure.
4. Construction of a new building on a parcel with a designated Historic Landmark.

H-1f Design criteria for alterations of and additions to local Historic Landmarks. At the discretion of the Community Development Director and/or Historical Landmarks Commission, an owner proposing any construction or alteration that may affect the historical character of the structure may be required to obtain an analysis of the proposed changes by a cultural resources consultant or other knowledgeable professional to determine the impact on the building's historical features.



In modifying historic structures, the distinguishing original qualities or character of the building shall not be destroyed. The removal or alteration of any historic material or distinctive architectural feature shall be avoided whenever possible. Whenever practicable deteriorated architectural features shall be repaired or restored rather than replaced. Contemporary design for additions are not prohibited when such additions are compatible with and do not destroy the historical or architectural character of the property.

H-1g **Preservation Incentives.** To encourage property owners to obtain local Historic Landmark designation, the City will provide the following incentives or assistance:

1. Exemption from the requirements to provide any additional off-street parking, except for additions 200 or more square feet in size.
2. Exemption, for nonconforming uses, from Land Use Code limitations pertaining to non-conforming structures and site conditions.
3. Compliance with the State Historic Building Code and portions of the Uniform Code for Building Conservation, rather than the current edition of the Uniform Building Code.
4. Conservation easements for facades that may provide tax advantages to the donor.
5. Establishment of a Mills Act program, by the City, which would provide property tax reductions for historic properties subject to program criteria.
6. Facade rehabilitation grants or loans, through the Community Development Agency, for designated historic commercial structures.

H-1h **Historical Landmarks on the Humboldt State University campus.** The City encourages HSU to initiate procedures for the recognition and protection, in compliance with Public Resources Code Section 5024, of historic structures and other historic resources on the campus. The following structures, located on the HSU campus, are hereby identified as local Historic Landmarks.

- | | |
|-------------------|------------------|
| 1. Founders Hall. | 3. Nelson Hall. |
| 2. Gist Hall. | 4. Jenkins Hall. |

H-1i **Historical Landmarks Commission (HLC).** The City Council shall create a Historical Landmarks Commission consisting of persons having knowledge, by virtue of training or experience, of Arcata's social and building history or of design and building. The Commission shall promote public involvement and education in preserving Arcata's heritage of older buildings.

POLICY H-2 NOTEWORTHY STRUCTURES

Objective. Identify and encourage retention of structures which could qualify as historical landmarks, but are not currently designated. Although some of these structures may lack the level of significance attached to designated landmarks, they have an architectural or design character which represents particular building styles or eras in the City's development, and they contribute to the overall character and historical texture of a neighborhood.

H-2a **Noteworthy structures list.** The City shall direct the Historical Landmarks Commission to recommend and keep current a "Noteworthy Structures" list, and encourage retention of these structures. Noteworthy structures are those which may not have complete documentation as to their historical or architectural merit but which have notable characteristics. In order to be eligible for listing, a structure should have one of the following attributes:



1. Representative of a particular architectural style.
2. Representative of a period in the city's historical development.
3. Associated with social history of the city.
4. Of unusual or special design character.

H-2b **Incentives, list preparation, notification, and future landmark designation.** Those properties listed as noteworthy structures shall be eligible for the following incentives and assistance:

1. Exemption from the requirements to provide any additional off-street parking, except for additions 200 or more square feet in size.
2. Exemption, for nonconforming uses, from Land Use Code limitations pertaining to non-conforming structures and site conditions.
3. Compliance with the State Historic Building Code and portions of the Uniform Code for Building Conservation, rather than the current edition of the Uniform Building Code.
4. Conservation easements for facades that may provide tax advantages to the donor.
5. Facade rehabilitation grants or loans, through the Community Development Agency, for designated historic commercial structures.

The Historical Landmarks Commission shall notify the owners of property being considered for placement on the list. Those owners shall be given the opportunity to contest and appeal the listing. There shall also be a procedure established for properties to be removed from the list. The owners of properties listed as having noteworthy structures are encouraged to apply for Historic Landmark designation.

- H-2c **Noteworthy structures on Humboldt State University campus.** The Wagner House located on campus is hereby identified as a noteworthy structure. The City requests that all structures of historic value be preserved and protected from demolition and from alterations or additions that are incompatible with their historical character.

Noteworthy structures on the HSU campus will be added to the noteworthy structures list developed by the City pursuant to H-2a.



- H-2d **Design review approval.** Design Review Commission review and approval, with input from the Historic Landmarks Commission, shall be required for all exterior alterations to noteworthy structures, when or if alterations require a building permit, including changes in types of materials and additions.
- H-2e **Design criteria for alterations and additions.** Prior to approval of any exterior change, the Design Review Commission shall make findings of fact that the alteration or addition is compatible with and does not destroy the historical or architectural character of the property and the immediate neighborhood.
- H-2f **Demolition Controls.** [See policy H-5].

POLICY H-3 ARCATA PLAZA AREA HISTORIC DISTRICT

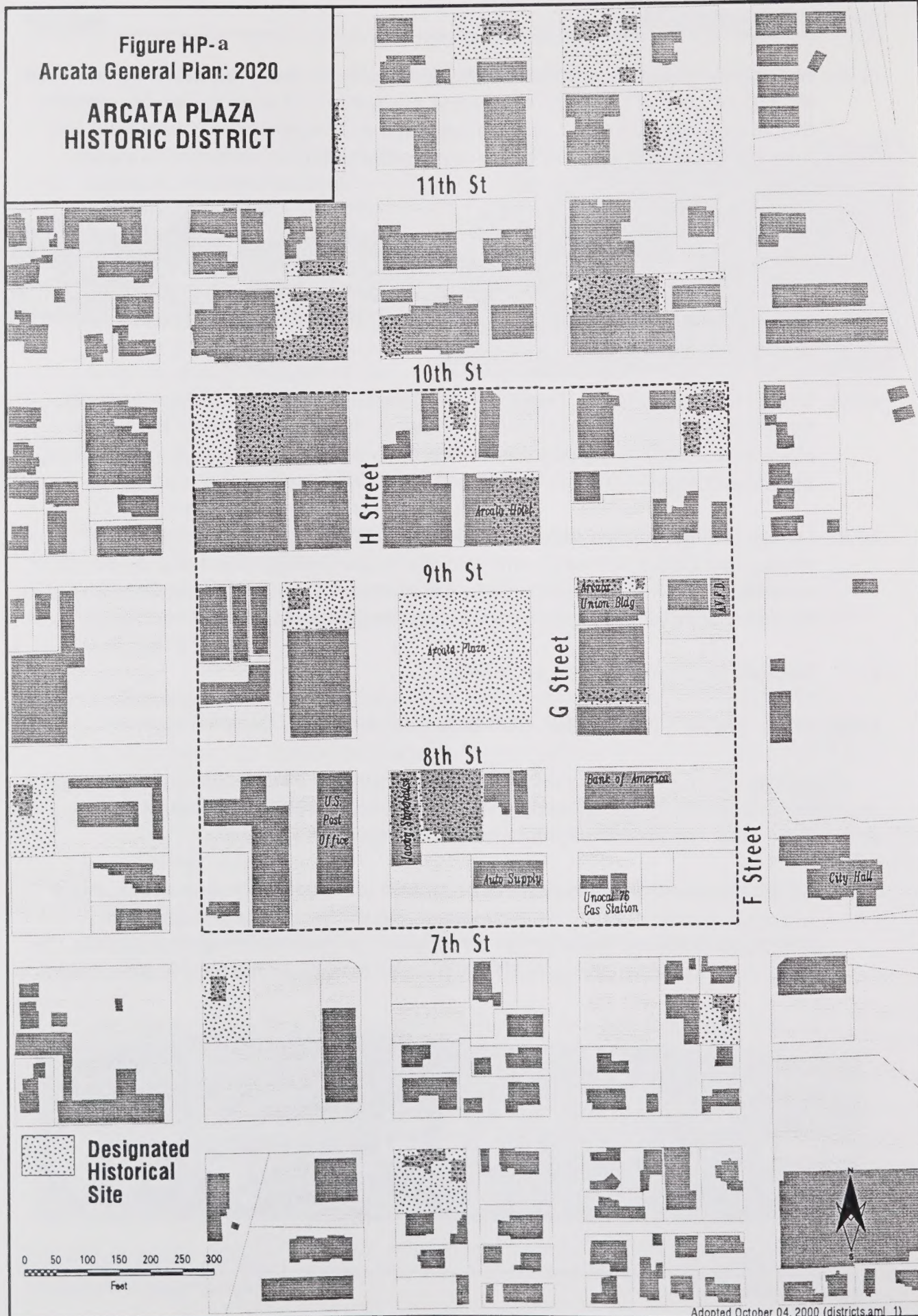
Objective. Protect and preserve the Arcata Plaza and the older structures that border the adjacent streets and help define the Plaza's character, for the unique historical, architectural, aesthetic, and economic values that it represents to the city.

- H-3a **Arcata Plaza Historic District.** The Plaza Area has a special character and unique historical, aesthetic and cultural interest and significance to the residents and businesses of Arcata. Reflecting its central place in Arcata's heritage and identity, the Plaza Area, as shown on Figure HP-a, is hereby designated as a local historic district.



Figure HP-a
Arcata General Plan: 2020

**ARCATA PLAZA
HISTORIC DISTRICT**



Adopted October 04, 2000 (districts aml 1)

- H-3b **Historic District combining zone.** The Plaza Area Historic District shall, by ordinance pursuant to the Land Use Code, be designated within the Landmark Historic District Combining Zone. Structures within the Historic District shall receive the same protections as are provided to individually-designated Historic Landmarks.
- H-3c **Controls on demolition.** [Policy H-5 applies.]
- H-3d **Design review approval.** Review and approval by the Design Review Commission shall be required for all exterior alterations of and additions to structures located within the Plaza Area Historic District.
- H-3e **Design criteria for alterations and additions.** [policies D-2e and D-2g shall apply]
- H-3f **Regulatory and other incentives for preservation.** In addition to the regulatory and other incentives in H-1g, the following shall also apply:
1. The City Council, with the help of the Historic Landmarks Commission and the Historical Sites Society of Arcata, shall develop a commemorative plaque program to provide special identification of historical structures.
 2. Non-conforming uses that have historical value will be allowed to continue.
- H-3g **Arcata Plaza as a historic site.** The Arcata Plaza Historic District includes at its center the city park known as the Arcata Plaza. The following principal features of the Plaza which define its historical character shall be preserved:
1. The McKinley Statue at the center of the Plaza.
 2. The generally symmetrical pattern of walkways.
 3. The open nature of the Plaza and the absence of buildings within it.
 4. The Women's Christian Temperance Union drinking fountain on "H" Street.
 5. The existing Plaza palm trees.

POLICY H-4 NEIGHBORHOOD CONSERVATION AREAS (NCAs) AND SPECIFIC PLANS

Objective. Designate the Central Arcata, Arcata Heights, Bayview, and Bayside areas as Neighborhood Conservation Areas and assure that new construction, modifications or alterations of noteworthy structures, and significant changes to other structures are harmonious with the existing character of these neighborhoods.

- H-4a **Neighborhood Conservation Areas.** The following NCAs, with the boundaries shown in Figure HP-b, are hereby established:
1. Bayview Conservation Area.
 2. Arcata Heights Conservation Area.
 3. "Central" Conservation Area.

H-4b **Demolition controls.** [See policy H-5.]

H-4c **Design Review.** All structures located within an NCA, including single-family houses, historic structures identified in specific plans, and existing structures with exterior alterations or renovation of more than 25 percent of the floor and/or exterior wall area, shall be subject to approval. Prior to approval, the finding must be made that the design will be compatible with the existing character of the NCA.

H-4d **Rehabilitation assistance programs.** Any City-sponsored or assisted rehabilitation programs shall give priority to qualifying structures within the boundaries of NCAs. Such rehabilitation shall be consistent with the architectural and aesthetic character of the area and the individual structure.

H-4e **Design criteria for alterations and additions.** Prior to approval of any exterior change requiring a building permit, the Design Review Commission shall make a finding that the alteration or addition is compatible with and does not destroy the historical or architectural character of the property and the surrounding neighborhood conservation area.

H-4f **Specific Plan Districts.** The following Specific Plan Districts, with boundaries shown in Figures HP-b and HP-c, are hereby established:

1. Bayside Specific Plan District.
2. "South of Samoa" (SOS) Specific Plan District.

Specific Plans prepared for these Districts will include preservation measures for historic and noteworthy structures.

POLICY H-5 CONTROLS ON DEMOLITIONS OF STRUCTURES

Objective. To prevent the premature demolition of existing buildings without first evaluating whether they are contributory to the historical or architectural character of the City or neighborhood and to consider the potential for preservation of those found to contribute to such character.

H-5a **Discretionary demolition review required.** No building within the City shall be demolished, in whole or in part, without review and approval by the Historical Landmarks Commission prior to issuance of a Demolition Permit. A Notice of Proposed Demolition shall be provided to all property owners within a 300-foot radius and to the Historical Sites Society of Arcata.

Figure HP-b
Arcata General Plan: 2020
**LOCAL HISTORIC
LANDMARKS,
NEIGHBORHOOD
CONSERVATION
AREAS AND
SPECIFIC PLAN
DISTRICT**



Figure HP-c
Arcata General Plan: 2020

**BAYSIDE SPECIFIC
PLAN DISTRICT**

 **Designated
Historical
Site**

0 100 200 300 400 500 600

Feet



Prior to its decision, the HLC shall consider the recommendations of the Historical Sites Society of Arcata or its designated representative. For partial demolitions, the applicant shall be required to submit a demolition plan showing those portions to be demolished and those to be retained. The following findings shall be required to approve demolition permit:

1. The building does not contribute to the historical or aesthetic character of the neighborhood or the city.
2. Although the building does have historical or aesthetic merit, it:
 - a. has sustained substantial damage to key structural components, and
 - b. there are no feasible alternatives to demolition of the building.

H-5b **Waiting period for demolition of designated landmarks.** Any approved demolition permit for designated historical landmarks shall be automatically subject to a delay of 180 days before the building permit for demolition may be issued by the City.

H-5c **Deconstruction of older buildings.** In those instances where demolition is authorized, it is encouraged that the buildings be deconstructed and that building components, fixtures, and materials be salvaged for future re-use.

POLICY H-6 PUBLIC PARTICIPATION, INFORMATION, AND EDUCATION POLICY

Objective. Promote public awareness of the City's historical heritage and resources, provide information and education about the methods and techniques to protect and enhance the quality of these resources, and encourage public participation in preserving Arcata's historical heritage.

H-6a **Role of Historical Sites Society of Arcata (HSSA).** The City shall send notice to the HSSA on all matters pertaining the preservation of historical resources. These include, but are not limited to, requests for comments on proposed Historic Landmarks, additions to the list of noteworthy structures, and proposed alteration or demolition of such structures.



The HSSA may submit its comments to the Historical Landmarks Commission. In consultation with the HSSA and the HLC, the Community Development Department shall prepare a brochure which provides guidelines and federal standards for restoration, alteration, and additions to historical landmark and noteworthy structures. The HSSA is also designated as the organization to oversee the operation of Phillips House Museum of the City of Arcata.

- H-6b **Commemorative plaques for historical structures.** In order to provide greater recognition and identification of designated historical landmark structures and to comply with federal standards, a commemorative plaque program should be developed. The HSSA is encouraged to be the lead organization for this effort.
- H-6c **Informational guides and walking tours.** The City encourages the HSSA and Arcata Chamber of Commerce to prepare informational guides or walking tour guides for Arcata's most significant historical resources. The purposes of the tour guide(s) are to promote appreciation of the community's heritage sites and contribute to Arcata's tourism attractions.
- H-6d **Brochure on benefits and advantages for designating historical landmarks.** The Arcata Community Development Department shall prepare an informational brochure which describes the benefits and advantages of having structures or sites designated as local Historic Landmarks.



POLICY H-7 ARCHEOLOGICAL AND CULTURAL RESOURCES

Objective. Protect and preserve Native American and Euro-American archeological sites and cultural resources within the City of Arcata.

- H-7a **Cultural Resources Project Review.** As part of the environmental and project review process, the City of Arcata shall enter into a Memorandum of Agreement (MOA) with the Northwest Information Center of the Historical Resources Information System of the State of California. Under the MOA, all proposed discretionary projects under the California Environmental Quality Act shall be subject to cultural resources sensitivity review by the Northwest Information Center. In order to provide a context for city projects, for the evaluation of cultural significance and for the interpretation of the results of cultural resources project reviews, the City of Arcata shall contract for a general prehistoric, ethnographic, and historic overview of the city and its environs.
- H-7b **Archaeological Surface Reconnaissance.** If the cultural resources project review determines that the project is located in an area with a high probability of archaeological resources, an archaeological survey by a professional archaeologist or other qualified expert shall be performed.

 H-7c **Mitigation of potential impacts on archeological resources.** If the results of the surface reconnaissance show that the project area contains a resource of cultural significance, and if it is demonstrated that a project will cause damage to such a resource, the City may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of other treatment include, but are not limited to, the following:

1. Modifying the project to avoid portions of the site with archaeological resources.
2. Providing or conveying easements or other deed restrictions.
3. Capping or covering archaeological resources with a soil layer before construction.
4. Planning open space to incorporate archaeological sites.

 H-7d **Monitoring of Construction.** In appropriate circumstances, when archaeological resources are likely to be present at a construction site, monitoring of excavation and other soil disturbing activities by archeological and/or Native American observers shall be required.

 H-7f **Discovery of archeological resources.** Upon discovery of archeological or paleontological materials, all grading or other land-disturbing construction activities at the site shall be suspended until the nature of the cultural resources has been ascertained and the appropriate disposition method determined.

TABLE HP - 1 DESIGNATED HISTORICAL SITES LIST

#	NAME		Street Address	Built	Historic Period
1	Fry House	290	12th Street	1874	Settlement Period
2	Dillon House	188	11th Street	1886	Settlement Period
3	Cates House	185	12th Street	1884	Settlement Period
4	Malvich House	1030	C Street	1914	Craftsman Period
5	Moore House	930	D Street	1903	Transitional Period
6	Shuman House	965	A Street	1906	Transitional Period
7	Aaron Alden House	947	A Street	1908	Transitional Period
8	Putnam-McCready House	913	A Street	1910	Transitional Period
9	Simms-Hunt House	855	A Street	1905	Transitional Period
10	Phillips House	71	7th Street	1855	Settlement Period
11	Beacom House	68	12th Street	1889	Settlement Period
12	Maronich House	87	12th Street	1889	Victorian Period
13	Susan House	67	11th Street	1874	Settlement Period
14	Leveque House	320	Park Avenue		
15	Ca. Central Creameries Plant	2151	9th Street	1918	Craftsman Period
16	Thomas Devlin House	885	K Street	1900	Transitional Period
17	Burrows House	453	F Street		
18	Simpson House	493	G Street		
19	Truesdell House	494	H Street	1876	Settlement Period
20	Fleckenstein-Newton House	588	H Street		
21	Monette House	665	F Street	1885	Settlement Period
22	Senevey-Menefee House	513	I Street	1880	Settlement Period
23	Baiocchi House	895	7th Street	1925	Craftsman Period
24	Selvage House	609	J Street	1874	Settlement Period
25	Eddy-Greene House	987	8th Street		
26	Vaissade House	927	J Street	1905	Transitional Period
27	Nixon House	1022	10th Street	1858	Settlement Period
28	Minor Theatre	1013	H Street	1914	Craftsman Period
29	Minor Building	1015	H St.	1914	Craftsman Period
30	Epicurean Restaurant	1057	H Street	1884	Victorian Period
31	First National Bank	1000	H Street	1913	Craftsman Period
32	Arcata Theater	1036	G Street	1937	Modern Period
33	Seely & Titlow Building	970	I Street		
34	Chevret House	739	10th Street		
35	Murray House	987	F Street	1901	Victorian Period
36	Hotel Arcata	780	9th Street	1915	Craftsman Period
37	Hunt House	839	9th Street		
38	Plaza		Block 167	1850	Settlement Period
39	Union Building	898	G Street	1890	Victorian Period
40	KXGO Radio/ Western Auto	826	G Street		
41	Old Post Office Building	735	8th Street		
42	Jacoby Building	791	8th Street	1857	Settlement Period
43	Packer's House	630	11th Street	1870	Settlement Period
44	Sowash House	1160	G Street	1914	Craftsman Period
45	Morgan House	1192	G Street	1901	Victorian Period
46	Miller House	1193	G Street	1900	Transitional Period

#	NAME		Street Address	Built	Historic Period
47	Pythian Castle	1100	H Street	1884	Victorian Period
48	Stewart Foster House	1139	H Street		
49	Moulton-Barlow House	860	11th Street	1907	Transitional Period
50	Wagner Block House	1157	J Street	1920	Craftsman Period
51	Wagner Block House	1187	J Street	1920	Craftsman Period
52	Wagner Block House	1087	12th Street	1920	Craftsman Period
53	Schorlig House	1050	12th Street	1885	Victorian Period
54	C.E. Daniels House	918	12th Street	1885	Victorian Period
55	Beers-Ely House	1285	I Street	1877	Settlement Period
56	Bair-Stokes House	916	13th Street	1888	Victorian Period
57	Horel House	980	13th Street	1904	Transitional Period
58	McCormack/ MacMillan House	1056	13th Street	1903	Transitional Period
59	Gastman-Gaynor Beer House	1362	K Street	1902	Transitional Period
60	David Wood House	1318	H Street	1910	Craftsman Period
61	Ericson House	1376	H Street	1870	Settlement Period
62	Whaley House	1395	H Street	1855	Settlement Period
63	Zehndner-Parton House	1164	14th Street	1902	Transitional Period
64	Stone House	902	14th Street	1888	Victorian Period
65	Cullberg House	1452	I Street	1862	Settlement Period
66	A. Gastman House	1492	H Street	1898	Victorian Period
67	William-Smith House	1542	H Street	1888	Victorian Period
68	Jako-Wagner House	1593	F Street		
69	Barter Bungalow/ Court	1645	G Street	1930	Craftsman Period
70	Smith-Mckenzie House	1619	H Street	1877	Settlement Period
71	Scribner House	1661	H Street	1885	Victorian Period
72	Sweet House	1717	H Street	1911	Craftsman Period
73	Godden House	938	17th Street	1919	Craftsman Period
74	Davidson-Carroll Store/ House	1593	I Street	1914	Craftsman Period
75	Keller House	1566	I Street	1894	Victorian Period
76	Stewart School Building	1125	16th Street	1925	Craftsman Period
77	St. Mary's Church	1090	16th Street	1884	Victorian Period
78	Greenwood Cemetery	1757	J Street	1860	Settlement Period
79	Nelson Hall		Humboldt St. Univ.	1940	Craftsman Period
80	Gist Hall		Humboldt St. Univ.	1933	Craftsman Period
81	Jenkins Hall		Humboldt St. Univ.	1950	Craftsman Period
82	Founders Hall		Humboldt St. Univ.	1921	Craftsman Period
83*	Bayside Post Office	1786	Old Arcata Road		
84*	Chaffey House	1220	Spear Avenue	1887	Victorian Period
85*	O'Grady House	1630	27th Street		
86*	Strobel House	1621	J Street	1874	Settlement Period
87*	Zehndner-Harpst-Austin House	1860	11th Street	1870	Settlement Period
88*	McMillian House	589	F Street		

*Numbers do not appear on map.

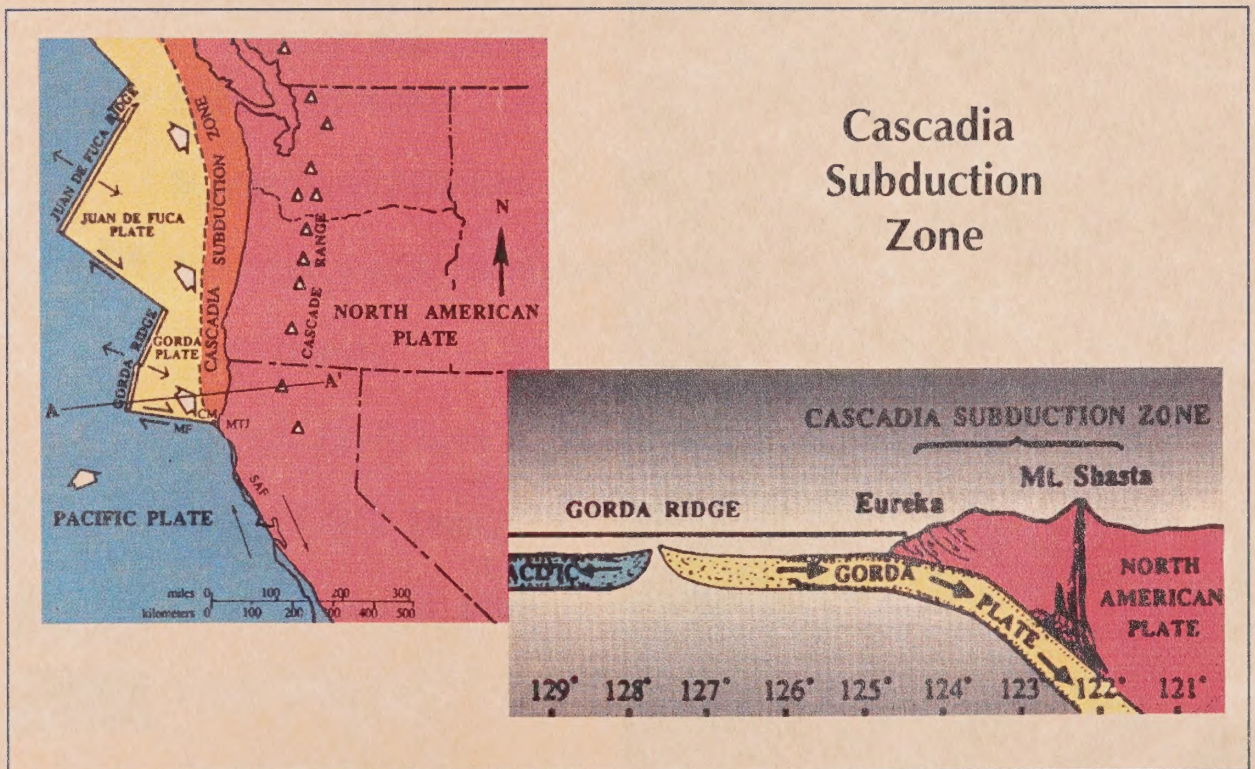
5.6 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE	RESPONSIBLE PARTY	TIME FRAME
LU-1	Historic Landmarks, conservation easements (LUC Amendment) A. Revise development standards for designated landmarks (delete additional uses, restrict conversion of res. structures in res. zones to non-residential uses, add other incentives). B. Revise Historical Landmarks combining zone re: demolition controls. C. Add authority for conservation (facade) easements. D. Define role of Historical Landmarks Commission. E. Add requirement for demolition permit. F. Create authority for Mills Act contracts.	Community Development Dept./ Planning Commission	Year 1
H-1	Create Historic Landmarks Commission The City shall appoint a Historic Landmarks Commission for the purpose of pursuing Certified Local Government status, developing a Noteworthy Structure List and promoting other historic preservation activities. This includes coordinating with HSU for listing of State owned historic structures.	City Council	Year 1
H-2	Historic resources inventory Update historical resources inventory (add structures throughout the City based on age, and add Bayside area to inventory).	Comm. Devel. Dept./ Historical Landmarks Commission	Year 2
H-3	Certified local government status Apply to the State Office of Historic Preservation for Certified Local Government status.	Historical Landmarks Commission	Year 2
H-4	Training and information program Develop a design brochure(s) and a brochure on benefits of landmark designation.	Historical Landmarks Commission	Year 2
H-5	Noteworthy Structures List The Historical Landmarks Committee shall prepare and maintain a noteworthy structures list.	Historical Landmarks Commission	Year 1

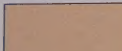
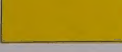
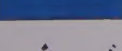
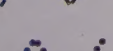
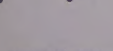
Chapter 6

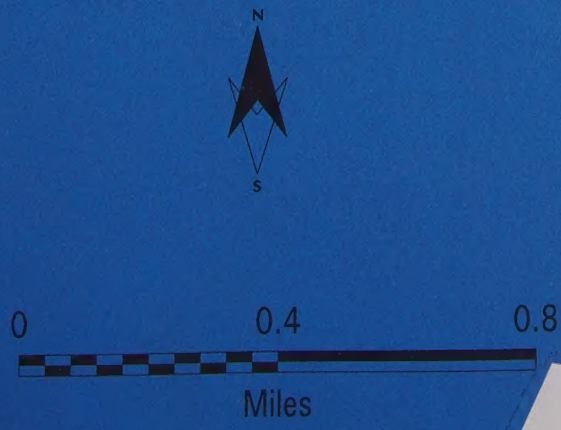
Health and Safety

Design Element
Historical Preservation Element



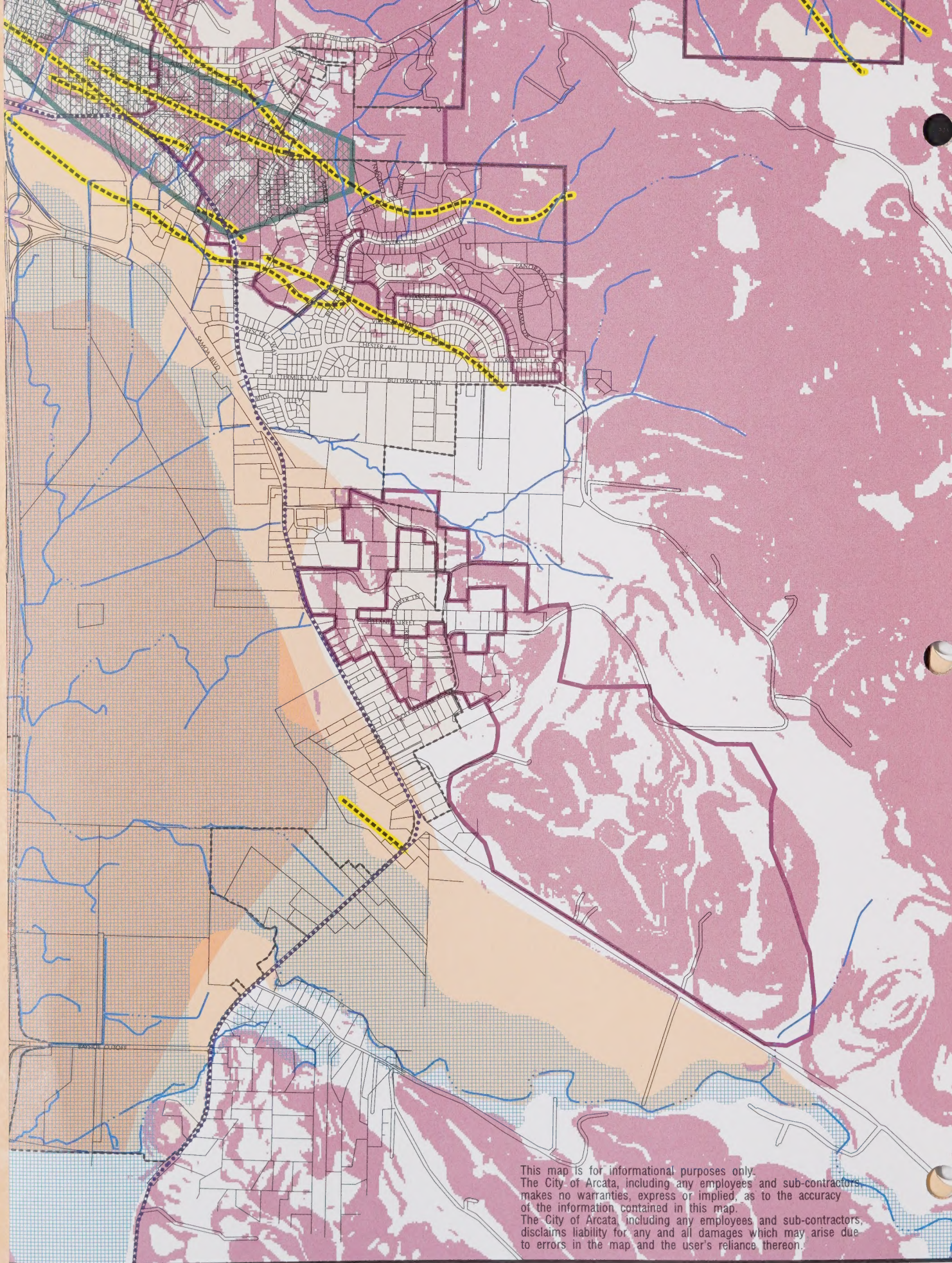
**Figure PS-a
Arcata General Plan 2020
HAZARDS MAP**

-  Areas Subject to Hillside Development Standards
-  Areas Where Slope is Greater than 15%
-  High Liquefaction
-  Moderate Liquefaction
-  100 Year FEMA Floodplain
-  Fault Tracing
-  50 Foot Fault Zone
-  Alquist-Priolo Zone
-  Tsunami Run-up Zone
-  Water Body
-  City Boundary
-  Coastal Zone Boundary



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PUBLIC SAFETY ELEMENT

6.1 INTRODUCTION

Overview of Emergency Preparedness and Police and Fire Services. Preparation for, and timely and adequate response to emergencies are essential community services that require planning and community-wide coordination. Emergency preparedness is the combined responsibility of the City, emergency response organizations, and community residents. Arcata's Volunteer Fire Department and City Police Department provide critical emergency response services and leadership, and serve as the community's primary response agencies in emergency situations. These agencies are most efficient when they can rely on emergency response organizations, such as the State of California's Office of Emergency Services, community groups, and individuals to provide organized support when needed. The Neighborhood Emergency Services Teams (NEST) that exist in several of Arcata's neighborhoods are good examples of local organizations with the resources and training to respond to emergencies.



Overview of Arcata's Potential Seismic and Geologic Hazards. The northern coast is one of California's most seismically active regions, and special precautions must be taken to protect residents from the effects of seismic events and hazards. Faults in and around the community, and the offshore Cascadia subduction zone (a 750-mile long major thrust fault) are considered active. Recent geotechnical studies identify fault zones, as well as areas susceptible to ground shaking, liquefaction, and tsunami run-up that represent safety hazards to the community. The potential for a major seismic event has prompted emergency response organizations, such as the Humboldt Earthquake Education Center at Humboldt State University, to provide information promoting earthquake and tsunami awareness and emergency preparedness. Geologic safety hazards also include potential slope instability on Arcata's hillsides and soil erosion. Mapped hazard areas are shown on Figure PS-a, located in a map pocket at the end of this Element.

The Cascadia Subduction Zone

North of the Mendocino Triple Junction, the Gorda Plate and its northern extension, the Juan de Fuca Plate, move eastward on a collision course with the North American Plate. The Gorda Plate slowly descends beneath the North American Plate along the Cascadia Subduction Zone. Most scientists believe that the upper 50 miles or so of the contact between the Gorda Plate and the North American Plate is locked. This boundary is called the megathrust.

Source: [Living on Shaky Ground](#).
Humboldt State University

Potential Flooding Hazards Overview. Arcata is bordered by the Mad River to the north, and bisected by several streams. These watercourses and their associated floodplains have been altered over time and are subject to future change. They have the potential, during peak flows, to overtop their banks with sufficient volume and velocity to damage adjacent structures, facilities, and natural areas. A number of Arcata's creeks have been modified with culverts, channels, and coverings. These structures inhibit natural infiltration and flood protection, resulting in increased flood volumes and velocities downstream. There is strong community interest in returning local creeks to more natural conditions, and incorporating measures, such as detention basins and natural infiltration, that will reduce flood velocities and volumes.



ARCATA'S DRAINAGE MASTER PLAN GOALS INCLUDE:

- Minimize increases in the volume and the flow of stormwater runoff associated with new development, so as to minimize increases in the hazards and the costs associated with flooding.
- Minimize the erosion potential from a development or construction site so as to prevent deposition of sediment into streams and other receiving water bodies.
- Maintain the integrity of stream hydrology by preventing stream channel erosion so as to sustain the hydrologic functions of streams.
- Reduce the pollutant load in stormwater runoff from developing and urbanizing areas so as to preserve the natural biological functions of streams and other receiving water bodies (and flood management and stream habitat quality).
- To the extent practical, acquire easements and properties necessary for effective drainage management.

Hazardous Materials Overview. Human exposure to hazardous materials and conditions must be minimized to ensure the well being of the community. Reducing this exposure must include cleaning up contamination from the past and avoiding use of hazardous materials in the future. Hazardous materials used primarily in wood products processing and auto-related operations have resulted in site and groundwater contamination that remain today. Minimizing future health hazards can be accomplished by:

1. Elimination of many toxic substances.
2. Substitution of environmentally safe alternatives.
3. Safer handling and disposal procedures of those materials still available.

There is community interest in replacing harmful substances and materials with biodegradable and less damaging substitutes, and cleaning up existing contaminated sites.

Human Health Hazards Overview. Sound physical and mental health are important factors when considering the well being of the community. Access to health care providers, social services, counseling, and facilities such as hospitals, clinics, temporary shelters and food distribution sites, should be taken into consideration when planning the community's future. These services and facilities are typically provided by agencies and organizations other than the City; however, the City can play an important role in minimizing health hazards by identifying locations where treatment and assistance are available, and by promoting accessibility to these services.

Guiding Principles and Goals.

- A. Establish and maintain emergency response capabilities and services at both the City and neighborhood levels.
- B. Promote seismic safety by restricting development in high risk areas, and strengthening buildings and infrastructure to withstand seismic events.
- C. Recognize that certain slopes and soils lack stability and are best left undisturbed.
- D. Establish and maintain sufficiently sized flood areas along Arcata's watercourses, to accommodate flood flows without damaging property or injuring residents.
- E. Reduce fire hazards through prevention and suppression.
- F. Protect residents and the natural environment from exposure to hazardous materials and substances.
- G. Promote a sense of security and safety by maintaining and supporting police services.
- H. Promote social services and programs that improve the physical and mental well being of community residents.
- I. Continue participating in the Humboldt joint powers authority, and promote hazardous materials reductions and safe handling.

NEST GOALS ARE TO:

- Organize the neighborhood.
- Evaluate your risk at home.
- Practice your skills as a group.
- Learn about disaster-preparedness.
- Prepare your family for any event.
- Train in survival & life saving skills.
- Obtain the necessary equipment & supplies.
- Get the neighborhood ready to support itself.
- Provide accurate information to emergency services.
- Provide skilled volunteer services to the community.
- Recover quickly from any disaster.
- Get positive results in disaster efforts (PRIDE).

6.2 POLICIES

The Public Safety Element contains the following policies:

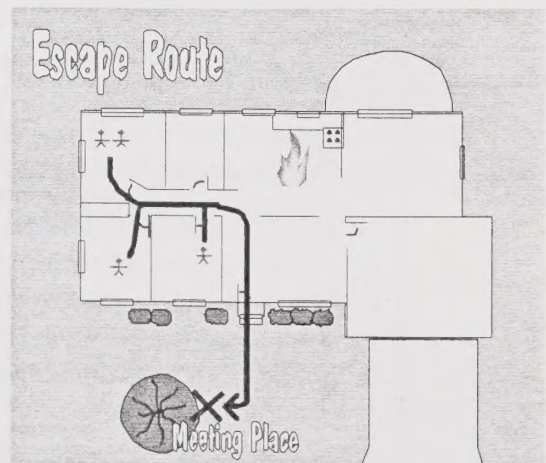
- PS-1 Emergency Preparedness
- PS-2 Seismic Hazards
- PS-3 Other Geologic Hazards
- PS-4 Flood Hazards
- PS-5 Fire Hazards
- PS-6 Hazardous Materials
- PS-7 Crime Prevention and Response
- PS-8 Human Health Hazards

POLICY PS-1 EMERGENCY PREPAREDNESS

Objective: Ensure that the City, its residents, businesses, agencies, and organizations are prepared for emergencies or disasters and have effective response and recovery plans in place.

PS-1a City Emergency Response Plan. The City shall maintain a comprehensive response plan for emergencies, including seismic events, tsunamis, slope failures, floods, storms, fires, and materials spills or contamination. The plan will provide for timely and coordinated response to emergencies that threaten community residents, property, and vital services. The plan will identify City and other emergency response agencies that should be contacted, and also identify neighborhood resources available for more localized assistance and relief.

PS-1b Evacuation routes/transportation facilities. Emergencies such as floods, storms, fires, distantly generated tsunamis, and hazardous materials spills may necessitate immediate evacuation of affected areas. A map of evacuation routes shall be included in City and neighborhood emergency response plans. These plans will also include evacuation methods for residents who are without, or unable to operate, vehicles. An emergency access plan shall be developed for access to the east side of town (east of State Route 101) after a major seismic event.



- PS-1c Disaster preparedness coordination using the Standardized Emergency Management System.** City staff responsible for emergency response shall be trained in Standardized Emergency Management System (SEMS) implementation, which is necessary to receive reimbursement from the State of California for disaster response related costs. This training includes instruction about the Incident Command System (ICS) which is used to manage emergency incidents or non-emergency events.

APPLICATIONS FOR THE INCIDENT COMMAND SYSTEM:

- Fires, hazardous materials (HAZMAT), and multicasualty incidents.
- Multijurisdiction and multi-agency disasters.
- Wide area search and rescue missions.
- Pest eradication programs.
- Oil spill response and recovery incidents.
- Single and multi-agency law enforcement actions.
- Air, rail, water, and ground transportation accidents.
- Planned events (celebrations, parades, concerts).
- Private sector emergency management programs.
- State or local major natural hazards management.

-  **PS-1d Siting and design of critical facilities.** Adequate shelter and continued operation of essential services, including communications, medical treatment, water delivery, fire and police services, and key transportation facilities are vital for responding to emergencies. These facilities and services shall be located and designed to withstand disaster impacts and have backup systems, such as emergency generators and water storage (including private and open water sources), that allow for their continuous operation during emergencies. New critical facilities shall not be located in areas with high physical hazards, including high liquefaction potential, flood zones, and tsunami hazards. Critical facilities shall be designed to be functional at peak capacity, following a magnitude 7.7 earthquake in the Mad River fault zone.

- PS-1e Development & design standards for emergency response.** New and renovated structures, as well as streets, driveways, and alleyways, shall be designed to provide adequate entry and exit by emergency vehicles and personnel. This includes visible street numbering, emergency vehicle turn-arounds, accessible building entry points and stairways, lighting, and interior evacuation routes.

- PS-1f Citizen training/Neighborhood and Business Emergency Services Teams.** The City of Arcata Police Department coordinates the organization and training of Neighborhood Emergency Services Teams and Business Emergency Services Teams (NEST and BEST). The NEST program is essential for mobilizing neighborhood response to emergencies. The NEST program shall be expanded to all neighborhoods.



POLICY PS-2 SEISMIC HAZARDS

Objective: Protect existing and new structures from seismic hazards. Identify and map seismic hazards and assure that any development within such hazard areas does not proceed until geologic and soils conditions are adequately investigated and appropriate mitigation measures, if any, are incorporated into development plans.

PS-2a **Development within fault zone/surface rupture areas.**



The City shall maintain current seismic information that identifies fault zones and probable surface rupture areas. Development in these areas shall be avoided, unless it can be demonstrated that structures and facilities can be designed to withstand effects of faulting and surface rupture. Building setbacks from faults, surface ruptures, and other seismic hazards, as specified in the most current Uniform Building Code, shall be maintained.



PS-2b **Mitigation of ground-shaking hazards.** Arcata will



experience ground-shaking during an earthquake. The City maintains seismic data files that identify areas where ground-shaking will most likely damage buildings and infrastructure. New construction and renovation shall incorporate the most current and effective seismic engineering measures to strengthen building foundations and infrastructure in these areas.

PS-2c **Mitigation of surface rupture and groundshaking hazards.** The City's Alquist-



Priolo Special Studies Zone map (Figure PS-a) and Geologic Hazard Land Use Matrix (Table PS-1) identify areas highly susceptible to surface rupture and groundshaking. Construction in these areas shall be restricted, unless it can be demonstrated, in geotechnical reports prepared by qualified personnel, that structures and facilities can be designed to withstand liquefaction hazards induced by seismic events.

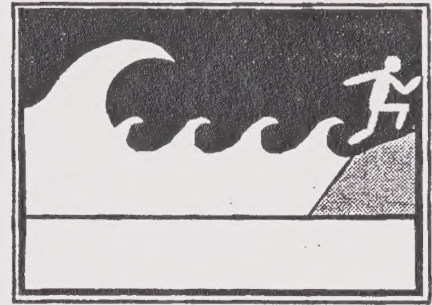
PS-2d **Requirement for and review of "Geotechnical Reports."** New building and



infrastructure construction, and substantial renovations in areas with seismic hazards, shall incorporate geotechnical report specified measures into project design. Geotechnical reports shall be required for structures or infrastructure in seismic hazard areas. Required reports, prepared by a registered geologist, certified engineering geologist, or registered engineer with expertise in seismic engineering, shall recommend mitigation for seismic impacts and identify alternative solutions. The City may require independent review of the geotechnical reports.

PS-2e Shoreline hazards (tsunami, tidal flooding).

A State of California study (*Planning Scenario in Humboldt and Del Norte Counties, California, for a Great Earthquake on the Cascadia Subduction Zone, Special Publication 115, California Department of Conservation, Division of Mines & Geology, 1995*) indicates that the Arcata Bay shoreline and adjacent areas, between McDaniel Slough and Mad River Slough, could be inundated by tsunami run-up. The City shall prohibit the location of critical facilities in the tsunami run-up area, and use available emergency broadcasting systems to communicate tsunami warnings. Should coastal access within the tsunami run-up zone be provided in the future, appropriate evacuation route signage shall be posted.



- PS-2f Failure of Matthews Dam.** All new buildings designed for human occupancy or use that are located in the area of potential inundation resulting from a catastrophic failure of Matthews Dam shall have an early-warning system and evacuation plan in place for those persons living and working there.
- PS-2g Earthquake-resistant building and infrastructure standards.** The current Uniform Building Code standards for strengthening buildings and infrastructure to withstand earthquakes shall be enforced. The competency of existing road and utility networks shall be evaluated and, where necessary, upgraded to withstand the most current ground acceleration standards.
- PS-2h Public information and disclosure.** The Humboldt Earthquake Education Information Center, at Humboldt State University, and the City of Arcata have earthquake/tsunami awareness information that is available to the public. The Center and the City will continue to make the most current information available to help the community prepare for and respond to seismic events.

THE HUMBOLDT EARTHQUAKE EDUCATION INFORMATION CENTER:

- Prepares and distributes earthquake education materials.
- Provides information when significant earthquakes occur.
- Conducts workshops for emergency planners, teachers and others.
- Has speakers for community group conferences and meetings.
- Operates the Humboldt earthquake hotline.
- Maintains a website.
- Conducts intensity studies of regional earthquakes.

GEOLOGIC HAZARD LAND USE MATRIX – KEY TERMS AND ABBREVIATIONS

Term	Explanation
P	Development prohibited
R1	Engineering geologic report and soils engineering report required. Engineering geologic report must be prepared by a Certified Engineering Geologist®. Soils engineering report may be prepared by a Registered Civil Engineer® with appropriate geotechnical knowledge and experience or by a Certified Engineering Geologist® with appropriate geotechnical knowledge and experience.
R2	Engineering geologic report required. Engineering geologic report may be prepared by a Registered Geologist® with appropriate geotechnical knowledge and experience.
®	All registrations and certifications must be licensed by the State of California.
D	Report requirement is left to the discretion of the City Building Inspector.
*	Fault Rupture Hazard. “SSZ” refers to Alquist-Priolo Special Studies Zone. “PAF” refers to Potentially Active Fault. See Hazards Map (Figure PS-a) and Seismic Safety Policies
**	See Slope Stability Hazard Map (Figure PS-b)
***	High Liquefaction indicates soil saturation and instability in moderate seismic events. Medium Liquefaction indicates soil saturation and instability in major seismic events. Low Liquefaction indicates soil saturation and instability in major seismic events. See Hazards Map (Figure PS-a)

POLICY PS-3 OTHER GEOLOGIC HAZARDS

Objective. Protect existing and new structures from non-seismic geologic hazards such as unstable slopes and soils. Require that all non-seismic geologic hazards be adequately addressed and mitigated.

PS-3a Slope stability hazards. Slope areas greater than 15%, shown on Figure PS-a, and certain less steep slopes with erosive soils may become unstable if disturbed. The City shall restrict grading, vegetation removal, and new construction in areas with unstable soils unless it can be demonstrated that these activities can occur without impacts. All grading of slope areas shall follow natural contours to maximize stability.

TABLE PS - 1 GEOLOGIC HAZARD LAND USE MATRIX

BUILDING TYPE/ LAND USE			EARTH- QUAKE SHAKING HAZARD	FAULT RUPTURE HAZARD*		SLOPE STABILITY HAZARD** LOW → HIGH				LIQUEFACTION POTENTIAL*** LOW → HIGH		
				SSZ	PAF	V	IV	III	II&I	III	II	I
Critical	Hazardous	Hazardous substance storage, reservoirs, natural gas storage tanks	R1	R2	R2	D	D	R1	R1	R1	R1	P
	Essential	Hospitals, fire and police stations, emergency control centers, power plants, power and communications substations, schools, theaters										
	Private	Auditoriums, hotels, large motels, major office buildings, high density residential										
Non Critical	Moderate Risk	Residential structures on existing lots with footing loads greater than typical 2 story wood frame dwellings or residential structures with 3 stories or more	D	R2	D	D	D	R2	R1	D	R1	R1
		Major Subdivisions	D	R2	R2	D	R2	R1	R1	D	R1	R1
		Heavy Industrial	R2	R2	R2	D	R2	R2	R1	R1	R1	R1
	Low Risk	Multi family structures greater than 4-plexes	D	R2	D	D	D	R2	R1	D	R1	R1
		Minor subdivisions	D	R2	D	D	D	R2	R1	D	R1	R1
		Light industrial, warehousing, commercial	D	R2	D	D	D	R2	R2	D	R1	R1
		Residential wood frame structures 2 stories or less on existing lots	D	D	D	D	D	R2	R2	D	D	D

 **PS-3b Grading standards for erosion and sedimentation control.** The design, extent, and location of grading shall minimize disturbance of the natural terrain and land features and shall not impact offsite areas. Trees and native vegetation shall be retained around graded areas to stabilize hillsides; retain moisture; reduce erosion, siltation and nutrient runoff; and retain the natural beauty of the area. Cleared areas susceptible to erosion shall be stabilized so that no materials are transported offsite.

PS-3c Hillside development standards. The land areas subject to hillside development standards are shown in Figure PS-a. Development on lands within these areas shall be subject to the following standards:

1. Each new lot created in areas subject to hillside development standards shall be required to contain a contiguous buildable area of at least 4,000 square feet. All parts of the building area shall have a natural slope of less than 15%. No more than 4,000 square feet of any existing lot which was legally created prior to adoption of this plan, and does not meet the preceding 15% standard, may be disturbed for development.
2. At least 50% of the area of any lot undeveloped as of the date of this plan shall be included in a "natural area" which shall remain in a natural, ungraded, undeveloped state. All slopes in excess of 25% shall be included in the natural area.
3. Vegetation removal in the natural area of each lot shall be subject to review and approval by the City.
4. All access roads and driveways shall be kept to the minimum feasible width and shall be designed to minimize grading and disruption of vegetation.
5. Access roads shall not exceed 15% slope for any distance. Individual driveways shall not exceed 17% slope.
6. Access roads or driveways shall be designed to avoid steep slopes and shall not have cuts exceeding fifty feet (50') nor fills exceeding twenty-five feet (25') in height.
7. The design, scope and location of grading for development should cause the minimum disturbance of the terrain and natural features of the land. Unavoidable grading should complement natural land forms. Mass grading of large pads and terraces shall not be permitted.
8. All manufactured slopes shall be planted or otherwise protected from the effects of storm run-off and erosion.
9. Time limits to avoid extensive grading during the wet season shall be imposed on new developments.
10. Any necessary conditions to control erosion and assure site restoration shall be required by the City. Measures shall include short-term controls to minimize erosion at construction sites and long-term controls for minimizing sedimentation and maintaining water quality.
11. Development in areas subject to development standards should demonstrate a concern for the view of the hills as well as the view from the hill.

- PS-3d **Slope-density land use restrictions.** Slopes greater than 25% are to be designated as natural areas and shall not be included in density calculations. Minimum parcel sizes on slopes shall be contingent on the site's ability to accommodate a building site with adequate access and utilities.
- PS-3e **Geotechnical reports.** Geotechnical reports shall be prepared for development of areas with unstable slopes and/or erosive soils. These reports will be prepared by qualified professionals, consistent with Policy PS-2d. Measures to ensure slope and soil stability shall be incorporated into the project design.
- PS-3f Provide available information, including potential for site slippage, effects of groundwater on slopes and soils, erosion potential, and other hazards, to homebuilders prior to the start of construction.

POLICY PS-4 FLOOD HAZARDS

Objective. Protect current and future populations and property from flood hazards. Assure that new development within floodplains does not proceed until appropriate mitigation measures are incorporated into development plans.

- PS-4a **Floodplain Mapping.** The City shall continue participating in the National Flood Insurance Program and maintain the most current Flood Insurance Rate Maps (FIRM) on file. The City shall also continue requesting that the Federal Emergency Management Agency provide hydrographic modeling (using the 1964 flood levels as a benchmark) and an update of flood mapping for the Mad River.

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program providing insurance to the public in participating communities. FEMA is the main federal government agency contact during natural disasters and publishes Flood Insurance Rate Maps, which identify flood potential based on a 100-year flood.

- PS-4b **Limitations to development adjacent to Arcata Bay and along Bay shoreline (tidal flooding, tsunami, failure of dikes or tidegates).** The Arcata Bottom and other low lying areas adjacent to Arcata Bay, McDaniel, Butcher's and Gannon Sloughs, and Arcata Marsh are susceptible to flooding from extreme Bay tidal action, tsunami run-up, seiche, dike or tidegate failure, heavy rainfall that can't drain, and Mad River flood events. Where not otherwise restricted, habitable structures and related improvements shall be appropriately elevated above flood levels, designed so as not to restrict flood flows, and shall comply with applicable provisions of Resource Conservation and Management Policy RC-2: Streams Conservation and Management, pertaining to Streamside Protection Areas (RC-2b and RC-2c). Land alterations for recreation and natural resource uses shall also not restrict or increase or channelize flood flows in a way that could cause inundation to adjacent areas.

PS-4c Limitations on development within Flood Zone. The mapped Floodzone A as determined by FEMA should be kept free of structures and other obstructions that would restrict flood flows. New construction in Flood Zone A shall be elevated, flood-proofed, designed to not constrict flood flows or drainage, and/or include other features, such as access for evacuation and emergency response, to protect human safety and minimize property damage. Landform alterations shall not impede flood flows in adjacent upstream or downstream areas. Any development in the floodplain must be consistent with City floodplain zoning regulations.

PS-4d Limitations to development within flood hazard zones. Arcata's creeks and sloughs have the potential to cause localized flooding and shall be maintained to allow the flow of floodwaters. Structures and other land form alterations in areas susceptible to localized flooding, outside areas defined in policies RC-2b and RC-3c, should be setback from the watercourse. Elevated and flood-proofed structures, and/or floodwater detention basins shall be provided to minimize flood damage and prevent any net increase in floodflows upstream or downstream. The City shall promote flood management practices for entire watercourses, to minimize the need for sandbagging and other temporary flood control measures that can have detrimental impacts to adjacent areas.



PS-4e Flood Insurance. Flood insurance is available from private insurers to compensate home and business owners for flood-related losses. Flood insurance rates are set by a site's proximity to mapped flood-prone areas. The City shall make information about flood-prone areas available to the public, to aid community residents and business owners in determining whether flood insurance should be purchased.

PS-4f Development standards in floodplains (surface drainageways and detention areas). All plans for new construction that could potentially encroach into a floodplain must incorporate measures for flood protection and show that there will be no adverse impact to the carrying capacity of the floodway. Setbacks, easements covering Floodzone A, and minimal use of impervious surfaces are measures strongly encouraged. Elevation of structures, anchoring, flood-proofing, and construction of detention basins are considered secondary and less desirable measures. The City's floodplain administrator shall verify this information and require appropriate certification before any development permits are granted.



PS-4g Preventive maintenance of streams and drainageways. Local streams carry the majority of Arcata's floodwaters and shall be maintained for flood protection as well as natural biological functions. All improvements and maintenance shall be done in accordance with the City's Drainage Master Plan.



-  PS-4h **Development review: drainage standards and drainage fees.** All new development shall meet current City drainage standards and pay all applicable drainage fees. The City shall provide incentives to reduce the amount of impervious surface associated with new and renovated uses by reducing drainage fees.

POLICY PS-5 FIRE HAZARDS

Objective. Minimize risk of personal injury and property damage resulting from structural (urban) and wildland fires.

- PS-5a **Management of urban fire hazards (development/design standards).** Structural fires demand immediate response from a combination of onsite and Fire Department resources in order to minimize injury and damage. Fire suppression devices such as extinguishers and sprinklers are important for initial response, reduce fire insurance premiums, and satisfy operations requirements for certain types of businesses. These devices are encouraged in new and renovated non-residential buildings and in all residential structures with more than four units, even when not required by fire and building code.



All buildings should have adequate lighting, street numbering, and access to ensure rapid response by fire-fighting vehicles. To ensure urban fire safety, the City shall enforce the Uniform Building and Uniform Fire Codes (UBC & UFC) currently in effect, and the Universal Building Code when it is adopted.

- PS-5b **Review of development for fire safety.** The Arcata Volunteer Fire Department takes an active role in reviewing new development for compliance with fire safety standards. The City shall continue to incorporate Fire Department review to ensure that driveways, turns-arounds, and other access ways have sufficient width, vertical clearance, and turn-around space for fire fighting vehicles. Roadways shall have an all-weather surface and grades shall not exceed the Fire Department's maximum slope standards for emergency access.

- PS-5c **Water supply (fire flow).** The City's fire hydrant system provides the primary source of water for fighting urban fires. The City shall maintain fire hydrant spacing so that no residential structure is more than 500 feet from a hydrant and no commercial or industrial structure is more than 300 feet from a hydrant. Each hydrant shall have adequate fittings and be capable of providing adequate water flows to meet Fire Department standards.



The City shall maintain adequate fire flows in its water system. Open-water sources such as ponds, swimming pools, private storage tanks, and reservoirs may be used as a secondary water source by fire-fighting apparatus. These sources shall be equipped with appropriate filtering devices or strainers to prevent clogging of water pumps.

PS-5d Management of wildland fire hazards. Wildland fires in forested areas of the City can cause property damage and threaten nearby structures. Buildings in forested areas shall use materials such as non-flammable perimeter vegetation and roofing material to prevent exposure to wildland fires. The City shall encourage the Arcata Fire Department to maintain its mutual aid agreement with the California Department of Forestry and Fire Prevention (CDF) to insure rapid response to wildland fires.

PS-5e Fire suppression services. The Arcata Volunteer Fire Department's (AVFD) jurisdiction (shown as District #1 on the AVFD service area map) includes the City's incorporated, sphere of influence, and planning areas, except for an outlying area along Jacoby Creek Road. The AVFD maintains two fire stations to provide rapid response to all fire calls within its service area. They also maintain mutual aid agreements with the CDF and the Eureka Fire Department for rapid response to fires in outlying areas.

POLICY PS-6 HAZARDOUS MATERIALS

Objective. Minimize the personal injury, property damage, and public health risks associated with the production, use, storage, disposal, and transporting of toxic substances or hazardous materials.

PS-6a Reduction of hazardous waste (source reduction). There are increasing numbers of environmentally safe materials and substances available that offer alternatives to hazardous materials. Improved water-based paints that replace oil and lead based paints, cellulose insulation materials that replace asbestos, and biodegradable antifreezes that replace glycol based coolants, are all examples of safer materials and substances currently in use. The City shall request information from County, State, and Federal agencies, as well as manufacturers and suppliers, regarding environmentally safe products and shall have a list of those products available to the public.



PS-6b Contaminated sites. There are sites in and around the City where wood product milling and production, vehicle and equipment storage and repair, agricultural production, and other uses may have resulted in site contamination. Materials such

as lead based paints may also contribute to contamination. Many of these sites are inactive and may be appropriate for alternative uses. Environmental Site Assessments shall be required prior to development review and approval of potentially contaminated sites, and cleanup is required prior to reuse. The City shall record and map sites with known contamination.

- PS-6c **Use of potentially harmful materials on public lands and rights-of-way.** The City of Arcata does not use toxic sprays or substances on vegetation in public lands or rights-of-way, and has been persuasive in stopping State agencies, such as Cal-Trans, from using toxic sprays along State rights-of-way within the City limits. The City shall continue this practice and prohibit other public agencies from using toxic sprays or substances within the City limits (see Resource Conservation and Management Element Policy RC-1i).
- PS-6d **Siting of facilities handling hazardous waste.** Businesses and agencies that use, store, or produce hazardous materials shall train employees and other users in safe handling and storage procedures, and shall post current Occupational Safety and Health Act (OSHA) and Humboldt County hazardous materials requirements. Businesses shall also comply with Federal “community right-to-know” regulations. The City shall consider proximity to sensitive receptors, such as schools, hospitals and other health care facilities, day care centers, and other immobile populations, when reviewing new facilities and businesses involved in these activities.
- PS-6e **Household and other small-quantity generators.** Households and small businesses accumulate solvents and cleaners, petroleum products, pesticides, and other toxic substances that are potentially hazardous if spilled, released into the atmosphere, or ingested. The City shall maintain a list of toxic substances which should be avoided and publicize collection dates and locations where these substances can be disposed of properly. The City shall coordinate with the County Hazardous Materials Department (Humboldt County) and the State Department of Toxic Substances Control (California Environmental Protection Agency) to ensure that collection sites are accessible to community residents.
- The City shall also encourage property owners and real estate agents to remove hazardous materials, or disclose their presence, to purchasers as part of property transfers. Property purchasers should have the option of accepting certain materials, such as paint, or requesting removal and cleanup prior to the property transfer.
- PS-6f **Hazardous waste management (recycling, treatment, disposal).** All commercial and industrial businesses and other operations that use, store, or produce hazardous materials, shall contract with a licensed hauler for pickup and disposal of waste materials, except for individual disposal complying with County, State and Federal requirements. All hazardous materials shall be stored in safe containers and

locations, and use of these materials shall be in compliance with County, State and Federal standards.

- PS-6g **Hazardous materials education program.** The City shall work with the Humboldt County Health Department and the California Department of Toxic Substances to develop educational materials explaining hazardous materials' impact on people, plants, and animals, and provide information on alternatives to hazardous materials. This information shall be made available to the public.

POLICY PS-7 CRIME PREVENTION AND RESPONSE

Objective. Promote law enforcement agency and community group efforts to reduce crime and assure timely and effective responses to calls for service.

- PS-7a **Development/building and site design standards for crime prevention.** Some criminal acts in and around buildings can be prevented or minimized by incorporating safety and security precautions into building and site design. These include a combination of onsite features such as alarm systems, secured entryways, lighting, and visible access. Crime prevention measures, such as providing alarm systems, security lighting, street numbers, and visibility for police surveillance, should be incorporated into, and around, new and renovated buildings. Gated communities hinder police and fire suppression access and shall be prohibited, consistent with Community Design Element policy.
- PS-7b **Community-based policing.** Community-based policing has proven effective in reducing crime by involving citizens in crime prevention. The City Police Department provides training to business and neighborhood groups in how to discourage crime and best respond when crime occurs. The City shall continue to provide citizen training, maintain relationships with community groups, and encourage Business Emergency Services Teams (BESTs) to reduce crime and augment the essential services of the Police Department. Foot and bike patrols shall be promoted to maximize interaction between citizens and police, to foster friendship, understanding, and mutual help.
- PS-7c **Cooperative Law Enforcement.** There are three law enforcement agencies based in Arcata: The Arcata Police Department, the HSU Police Department, and the California Highway Patrol. These agencies work together, responding to incidents throughout the City. The City shall continue to cooperate with other law enforcement agencies to maximize public safety within its boundaries. The City Police Department shall be the primary response agency within City limits since it is the only agency directly accountable to the government and citizens of Arcata.



PS-7d **Independent review.** The Arcata Police Department has an established review procedure for investigating complaints against law enforcement personnel. Complaints may also be referred to the Humboldt County Grand Jury. In addition, the City shall establish an Ombudsman position and/or police review commission whose membership reflects the diversity of the City's population and whose duties include:

1. Providing a means for independent, prompt, and impartial investigation and/or mediation of complaints brought against the City Police Department.
2. Setting and reviewing law enforcement policies, practices, and procedures.

PS-7e **Education and crime prevention funding.** The City recognizes that funds spent on education and crime prevention are more effective in reducing crime than funds spent on apprehending, prosecuting, and incarcerating criminals. The City shall pursue a long-term strategy of funding education and crime prevention programs.

POLICY PS-8 HUMAN HEALTH HAZARDS

Objective. Promote access to services and programs (prevention, treatment, and long term care) that will improve human health conditions for current and future populations. The City recognizes that its resources are limited but will work with other government agencies, non-profit organizations, social service and health care providers to help all residents meet and maintain basic physical and mental health. The City will serve as a model for other governmental entities that are addressing local health needs

PS -8a **Health care programs and facilities.** The City of Arcata does not directly provide health care programs or facilities; however, these facilities are operated in the City by a variety of health care providers and professionals, as well as non-profit and other organizations. The City shall allow health care facilities (such as clinics, counseling centers, and doctors offices) to be located in appropriate areas of the City, and encourage programs that serve all segments of the population.

PS-8b **Social services programs.** The City administers certain social services, such as temporary and permanent housing programs. Other public agencies, including the State of California, and Humboldt County, offer social services, such as public assistance, and food subsidy programs. There are also non-profit, religious, social, and other organizations, as well as businesses that offer social services such as counseling, educational, family assistance, child care, health education, and food subsidy programs. Social service needs shall be monitored, through population trend analysis and other indicators, and information disseminated to other social service providers.

Larger employers shall be encouraged to provide childcare services. The City shall coordinate with other public agencies and service providers to avoid duplication of services and shall assist in coordination, planning, and evaluating social services delivery. Additional services, such as Travelers Aid, shall also be encouraged, either through City sponsorship or identification of appropriate service providers. Social service facilities shall be located in areas that are accessible to users.



The General Plan Housing Element goal is to provide housing opportunities for people of all income levels, through the development of a wide range of housing types. The Element also contains affordability and fair housing policies as well as design standards to serve the needs of all population segments. The Housing Element shall be implemented to promote affordable and accessible housing for segments of the population with limited financial resources and limited mobility.

PS-8c Needs of cultural groups and special populations. Cultural groups, such as Native Americans and other local ethnic populations, and special populations, such as those with physical and mental disabilities, may require more specialized services than those provided in community-wide programs. The City shall allow, where appropriate, use of public spaces for cultural group activities, and shall consider the needs of special populations in City programs, activities, and land use planning.

PS-8d Improving community health. Health care costs and other factors, such as lack of knowledge, limited mobility, and cultural beliefs, prevent certain segments of the community from seeking both preventative care and treatment for illness. This can lead to increased rates of infection and the spread of disease, which impact community health. Non-communicable diseases, such as alcoholism and substance addiction, worsen without treatment and can also impact community health. The City shall encourage low cost health providers to offer preventative, urgent, and continuing health care services, including alcoholism and substance abuse programs, that are accessible to all segments of the community.

Community health may be jeopardized by lack of free access to clean water and sanitation facilities. The City shall work with other government agencies, non-profit organizations, and social service providers to plan, develop, and maintain such facilities.

The City shall prohibit camping/living in areas such as the Arcata Community Forest, where clean water and sanitation facilities are not available. If feasible, the City may provide or permit a short-term camping area for unsheltered persons.

6.3 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE	RESPONSIBLE PARTY	TIME FRAME
LU -1	Update seismic setbacks/structural requirements and hillside development standards (LUC Amendment) Update City land use code for setbacks from known faults and other hazards, geotechnical review and structural requirements, and hillside development standards.	Community Development Dept.	Year 1
PS -1	Neighborhood and Business Emergency Services Teams (NEST and BEST) Promote the formation of NESTs in all neighborhoods and the formation of BESTs in business communities. The City Police Department shall have a designated NEST/BEST coordinator available to assist neighborhoods with NEST organization and training, and to supply training materials (such as the <u>Captain's Handbook</u> Disaster Planning Guide).	Police Department	Ongoing
PS -2	Emergency preparedness and response programs Maintain and distribute current information about seismic risks and emergency preparedness (such as living on shaky ground – <u>How to Survive Earthquakes & Tsunamis on the North Coast</u> distributed by the Humboldt Earthquake Education Center, HSU). Maintain Standardized Emergency Management System training for senior City staff, including Incident Command System, multi/inter-agency coordination, mutual aid, and operational area concepts.	City Manager's Office/Arcata Fire & Police Departments	Ongoing
PS -3	Floodplain mapping and management program Update floodplain mapping throughout the planning area, including continued participation with National Flood Insurance Program.	Federal Emergency Management Agency	Year 5
PS -4	Cooperative law enforcement/independent review Establish an ombudsman and/or police review commission for independent investigation and mediation of complaints, and for reviewing law enforcement procedures.	District Attorney/ State AG/ Grand Jury/ Human Rights Commission	Year 5
PS -5	Safer materials and substances list Maintain a list of safer materials and environmentally friendly substances to replace toxic substances and hazardous materials.	Environmental Services Dept.	Year 2
PS -6	Education program for reduction of hazardous waste (resource reduction) The City shall compile information from County, State and Federal agencies, as well as from manufacturers and suppliers, regarding environmentally safe products and shall make that information available to the public.	Environmental Services Dept.	Ongoing

#	IMPLEMENTATION MEASURE	RESPONSIBLE PARTY	TIME FRAME
PS -7	Brownfield sites Record and map sites having known contaminants, contingent upon funds availability.	Community Development Dept.	Year 2
PS -8	Hazard information and protection Complete the updates of the GIS base maps for hazards, and link a computer at the Permit Application Counter in Community Development to the GIS for public and staff access.	Environmental Services Dept./ Community Development	Year 1

NOISE ELEMENT

6.4 INTRODUCTION

The Noise Element is one of the seven required General Plan Elements that must be prepared by California cities and counties (Government Code Section 65302). The



California General Plan Guidelines state that the Noise Element of the General Plan provides a basis for comprehensive local programs to control and abate environmental noise and to protect citizens from excessive exposure. The Noise Element is required to identify and appraise noise in the community and follow the guidelines adopted by the Office of Noise Control in the State Department of Health Services. Local governments must analyze and quantify noise levels, and the extent of noise exposure, through actual measurements or the use of noise modeling.

The air into which noise is emitted, and on which it travels, is a common resource of the community. It is a public good and as such its use, as well the responsibility of maintaining it, belongs to everyone.

THE STATE OF CALIFORNIA GENERAL PLAN GUIDELINES* FOR THE FUNDAMENTAL GOALS OF THE NOISE ELEMENT ARE:

- To provide sufficient information concerning the community noise environment so that noise may be effectively considered in the land use planning process. In so doing, the necessary groundwork will have been developed so that a community noise ordinance may be utilized to resolve noise complaints.
- To develop strategies for abating excessive noise exposure through cost-effective mitigating measures in combination with zoning, as appropriate, to avoid incompatible land uses.
- To protect those existing regions of the planning area whose noise environments are deemed acceptable and also those locations throughout the community deemed "noise sensitive."
- To utilize the definition of the community noise environment, in the form of CNEL or Ldn noise contours as provided in the Noise Element for local compliance with the State Noise Insulation Standards. These standards require specified levels of outdoor to indoor noise reduction for new multi-family residential constructions in areas where the outdoor noise exposure exceeds CNEL (or Ldn) 60 dB.

(*Appendix A of the Guidelines)

Loud noise is a health issue. The human ear is not designed to accommodate loud noise for long durations. Exposure to sounds louder than 90 decibels (e.g., a power lawnmower) for more than one or two hours begins to damage the inner ear. Therefore, all people,

businesses, industry, and organizations have an obligation to respect the health and comfort of others, and to acknowledge that the effects of broadcasted noise are not limited to their own private property. In sharing the community's common resources, everyone has an obligation to respect the health of others in ways that are compatible with, and do not detract from, other uses. Noise levels from sources commonly found in the community are shown in Figure N-a.

Definitions of noise, potential effects on people, and existing ordinances. Noise, commonly defined as unwanted sound, is an environmental phenomenon to which people are exposed throughout life. Noise is among the most pervasive pollutants, a waste product generated primarily by human activities.

As urbanization and development have intensified globally, regionally, and locally in Arcata, noise levels have also increased. Studies have shown that increased noise levels have a direct adverse impact on the quality of home, work, and recreational environments.

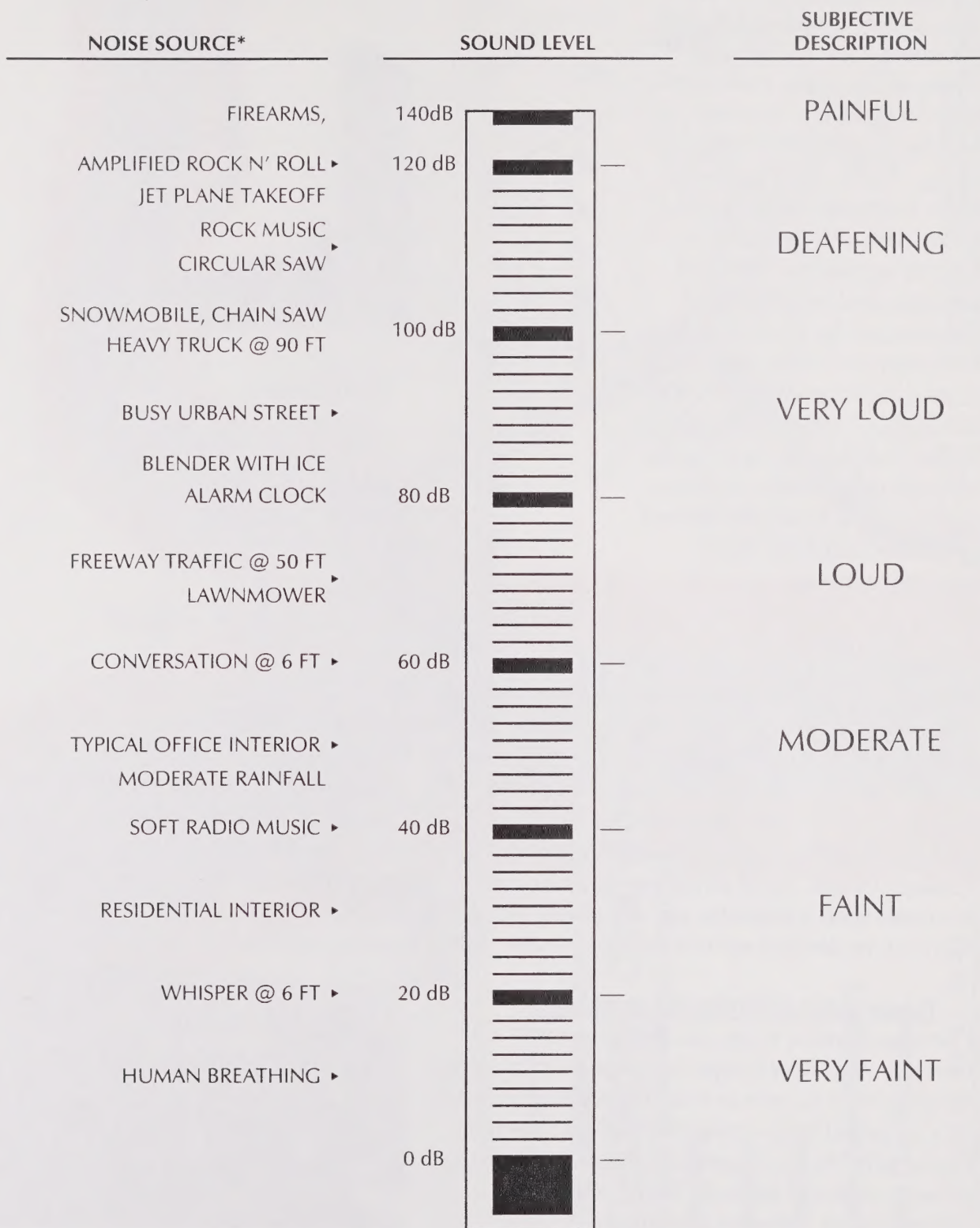
In recognition of these adverse impacts, the Arcata City Council passed a Plaza Area Noise Ordinance (City Ordinance #1249) prohibiting unnecessary, excessive, and annoying noise from all sources. The Noise Ordinance states that excessive noise levels, offensive noise, and unreasonably disturbing noise are detrimental to the public health, welfare and safety and are contrary to the public interest. Detrimental noises interfere with: sleep, communication, relaxation, and the full use of private property; use and enjoyment of the Arcata Plaza by the general public; noise-sensitive land uses, particularly residential apartments and lodging; and productive commerce. Detrimental noises contribute to hearing impairment and a range of adverse physiological stress conditions and adversely affect the value of real property.

It is the intent of the Noise Ordinance to protect the public health, comfort, convenience, safety, welfare, prosperity, peace, and quiet by reducing excessive noise levels and by prohibiting the generation of offensive, or unreasonably disturbing, noise.



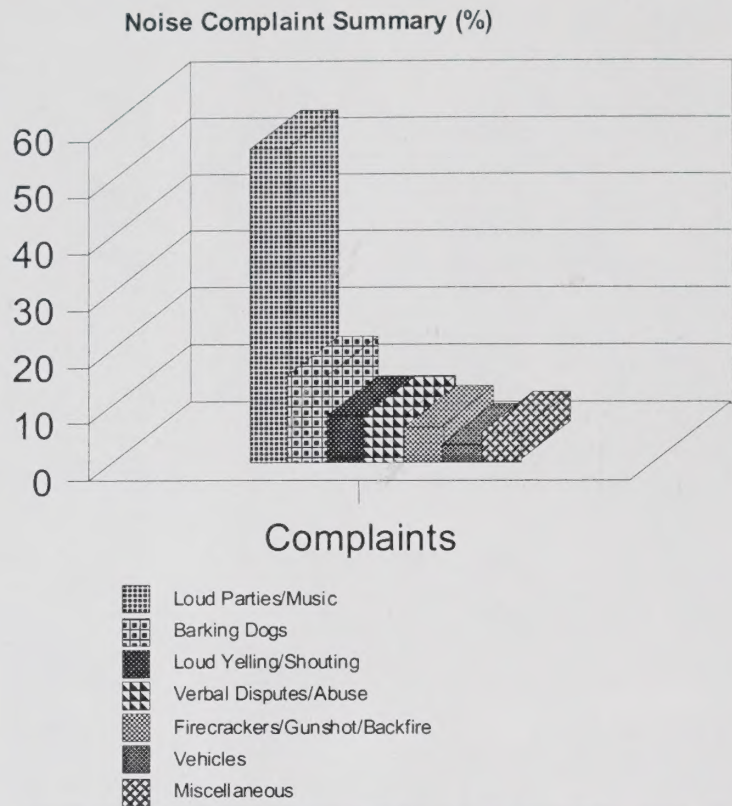
Noise environment overview. Arcata has experienced change from its small, rural town beginnings to a growing, urban community with more intensive and diverse uses. Preservation of surrounding open spaces, and General Plan policies for more efficient land uses, have promoted in-fill urban development which intersperses residential uses (noise receptors) with commercial and industrial land uses (noise generators). The proximity of noise generators to noise receptors such as higher volume vehicle travel on local roadways has resulted in increased noise levels at receptor sites. Future development of commercial and industrial uses will increase the potential for future noise conflicts.

FIGURE N-a A WORLD OF NOISE



* Unless otherwise noted, noise levels are measured at the source

A September 1997 community noise survey conducted as part of General Plan background studies showed that typical noise levels in noise-sensitive areas of the City range from 46 dB to 63 dB L_{dn} . Traffic, local roadways, major roadways (including State Routes 101, 299 and 255), railroad operations, industrial activities, and neighborhood activities are the primary sources of background noise levels. Some residences have outdoor activity areas directly exposed to major noise sources (such as the railroad tracks, major roadways, and industrial areas) that exceed generally acceptable noise exposure criteria.

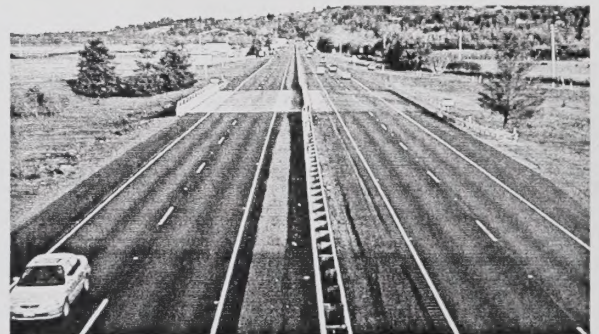


Note: The percentages expressed in this figures are projected based on the existing noise element (1986).

Noise complaints received by the City also measure noise levels. The Arcata Police Department has received increasing numbers of noise complaints over the last several years. Police activity reports show 866 noise complaints in 1995; 951 in 1996; and 1,043 in 1997, which is a twenty percent increase. Some of the most frequent noise complaints within the City of Arcata are associated with barking dogs, loud parties, boom boxes, car stereos, existing industrial activities, and existing on-site commercial noise sources such as outdoor speaker systems, street sweeping, and early morning garbage pickup. Some of these noises are considered infractions, and are covered in the penal code. Others are referred to other agencies, or determined to be unenforceable, and are not included in the complaint records.

Future noise environment overview.

Community noise levels can increase with development. This is especially true for noise along major roadways, such as State Routes 101 and 299. The projected future noise controls are shown in Figure N-b. As development continues, there is a growing potential for noise increases due to commercial or industrial operations. It is now



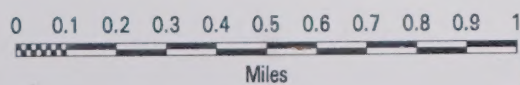
recognized that noise pollution can often be reduced through attenuation measures such as barriers, mufflers, and insulation, with little or no penalty to progress.

Figure N-b
Arcata General Plan: 2020
PROJECTED NOISE CONTOURS

[Based upon buildout of Land-Use Plan]

- 55 Decibels
- 60 Decibels
- 65 Decibels

- Coastal Zone Boundary
- Arcata City Boundary



Adopted October 04, 2000 (noisefig.aml)

This map is for informational purposes only. The City of Arcata, including any employees and sub-contractors, makes no warranties, express or implied, as to the accuracy of the information contained in this map. The City of Arcata, including any employees and sub-contractors, disclaims liability for any and all damages which may arise due to errors in the map and the user's reliance thereon.

Responsibilities of a Noise Element. The Noise Element advances the ethic that a low-noise-level environment is a common resource that can be enjoyed by all, and that noise generated by some has the potential to negatively affect others. The Noise Element provides a mechanism for evaluating and mitigating the potential effects of noise on the community. It identifies potential noise sources that exceed acceptable standards and noise sources that may be considered annoying. It also provides criteria for determining acceptable noise exposure. The California General Plan Guidelines state that the Noise Element will be as detailed as necessary to describe the local situation and mitigate local noise problems. This means that the City is not limited to applying noise controls and noise reduction techniques to projects and other activities requiring City review and permits, but can address other noise generating activities in the community.

The Noise Element sets policy direction for evaluating the potential effects of noise due to new industrial processes or commercial noise sources. (Projected future noise contours are shown on Figure N-b.) Many times, however, noise sources are overlooked during the review process, or are added on-site at a later date. Once the project is approved, the administrative actions for responding to complaints of these noise sources generally fall outside of the City's review process. In these cases a noise ordinance is required in order to determine compliance with local standards or the potential for annoyance.

In the event of an individual being annoyed due to a neighbor's barking dog or an existing commercial activity, a noise ordinance would provide a complaint and enforcement mechanism. These types of noises, however, are most effectively addressed through educating community members about "good neighbor policies," since dog ownership, or existing commercial activities, are not subject to City review, and enforcement is usually considered as a last resort. Complaint and enforcement mechanisms include:

- Ordinance 1249, for the Plaza Area only.
- Penal code 415 – Disturbing the Peace.
- Land Use and Development Guide regulations.

City responsibilities. The City of Arcata can set an example for business and industry by considering the acoustic concerns and future noise impacts of City operations and business. The City can lead the way by demonstrating that ongoing operations and new noise-producing uses and products can meet specified noise criteria by making effective noise attenuation information available, and by providing a procedure for mediating noise disputes. The City can accomplish this by preferential purchasing of quieter equipment; reducing use of noisy equipment (as demonstrated by City Council action to eliminate the use of leaf blowers in certain public areas); limiting hours of operation for public works projects (except for emergencies) in



residential areas; and incorporating acoustic materials and barriers in all new City facilities.

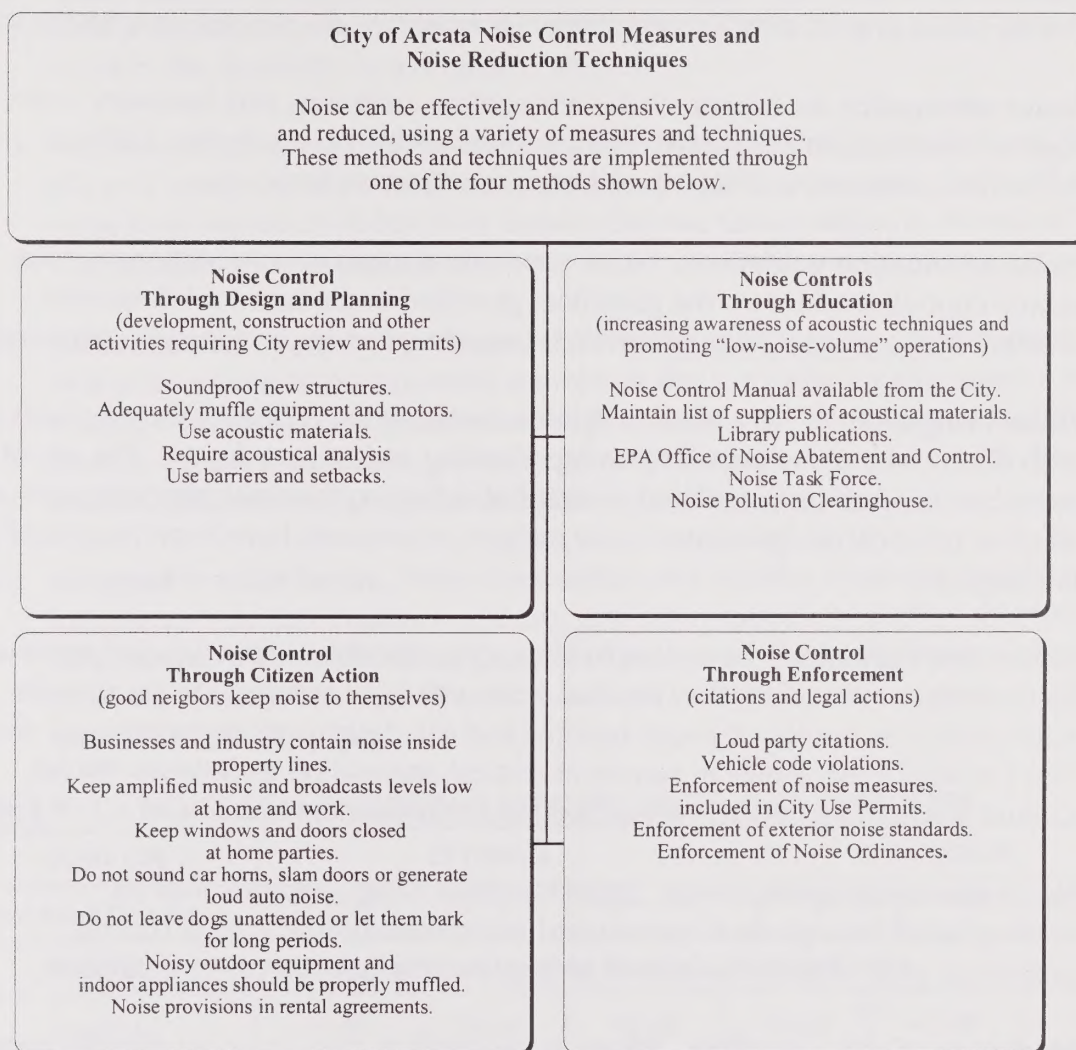
Public surveys on noise show that many people do not know how to effectively address noise issues. Community members in general appear to lack knowledge of how to reduce noise conflicts. There also seems to be a pattern of governmental agencies responding to noise complaints with little or no enforcement or action against noise violations. This pattern may be as typical of Arcata as other urban settings. To address this issue, procedures and educational materials are being developed, including a noise control manual.

Community responsibilities. The quality of the soundscape is a growing environmental concern and is an important aspect of the City's livability. To increase public awareness of achieving and maintaining a high quality soundscape, the community can draw on noise attenuation techniques, such as those in the Noise Control Manual.

One of the most effective ways to contribute to the solution is to be a good neighbor. Most importantly, this means taking responsibility for reducing noise at the source. Businesses and industry can contain noise generating uses and activities within buildings, or construct barriers so that noise does not reach adjacent areas. Residents should also consider how the noise they generate could affect others and reduce the level accordingly. Motorists and other vehicle operators should be conscientious of the potential for vehicle noise to disturb others. Figure N-c shows noise control measures for all neighbors and neighborhoods.

Guiding Principles and Goals.

- A. Reduce noise at the source.
- B. Protect City residents from the harmful and disturbing effects of noise through controls on noise-producing activities.
- C. Promote noise mitigation techniques in the design of both noise receptors and noise generators.
- D. Encourage state-of-the-art land use planning methodologies and acoustic control techniques (refer to City Noise Control Manual) to reduce existing and potential noise conflicts.
- E. Encourage cooperative and voluntary action by businesses and industry, to reduce noise emissions from annoying noise sources.
- F. Promote mediation as a means of reducing noise complaints which result from existing noise sources.
- G. Educate community residents about good neighbor policies, the benefits of reduced noise levels, and living in a community with a high quality soundscape.
- H. Bring all noise sources into compliance with noise guidelines by strongly encouraging voluntary compliance, pursuing funding for noise attenuation measures to mitigate any financial hardships, and through enforcement of a Noise Ordinance.

FIGURE N-c NOISE CONTROL MEASURES

6.5 NOISE POLICIES

The Noise Element contains the following policies:

- N-1 Noise Attenuation
- N-2 Stationary Noise Sources and Levels
- N-3 Transportation Noise Sources and Levels
- N-4 Requirements for Acoustical Analysis
- N-5 Intrusive and Intermittent Noise Sources

POLICY N-1 NOISE ATTENUATION

Objective. Reduce, or eliminate, noise impacts at their source by providing enclosures, barriers, and other on-site noise attenuation measures for noise generating activities. Monitor noise levels to ensure that acceptable noise levels are maintained on adjacent sites.

- N-1a **Noise attenuation measures.** Noise attenuation measures, and stationary noise source controls shall include the use of barriers, setbacks, site design, baffles, enclosures, silencers, and improved facade construction techniques.
- N-1b **Noise attenuation guidelines.** Noise attenuation measures and stationary noise source controls shall follow the guidelines provided in the technical document entitled: Noise Control Manual (which is considered an implementation measure).
- N-1c **Noise mitigation.** Where noise mitigation measures are required, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.
- N-1d **Noise level reduction.** To reduce existing, objectionable, industrial, and stationary noise levels at the source, the City shall work with local industries to incorporate noise control technology through building and site design and engineering solutions. The City shall make available current acoustical attenuation techniques (Noise Control Manual) for new and retrofitted industrial development.
- N-1e **Noise standards enforcement.** Enforcement of noise standards shall be accomplished through development and implementation of a noise control ordinance, post-project compliance testing, and through the use of mediation.
- N-1f **Mediation of noise conflicts.** Where noise conflicts may occur, all affected parties shall strive to use innovative and positive solutions to solve those disputes, including the use of trained mediators. The City recognizes that many noise issues can be resolved before they get to the complaint stage if there is a procedure for airing the issue with an impartial third party.
- N-1g **Resolution of noise disputes.** The City shall establish positive ways to discuss and resolve noise issues and disputes, including the use of trained mediators.

POLICY N-2 STATIONARY NOISE SOURCES AND LEVELS

Objective. Establish acceptable noise levels for land uses and activities that will protect community residents from the harmful effects of excessive noise exposure from stationary

noise generators. Maintain interior and exterior noise standards that will achieve land use compatibility with respect to community noise.

- N-2a **Noise contour maps.** The noise contour map (Figure N-b) and other estimates of noise source levels shall be used in conjunction with the noise source criteria to evaluate the feasibility of a proposed project.
- N-2b **New development of noise-sensitive uses.** New noise receptors shall not be allowed where the noise level from non-transportation noise generators will exceed noise level standards (Table N-1), unless effective noise mitigation measures that meet City standards are incorporated.
- N-2c **Noise created by new or proposed stationary noise sources.** Noise created by new or proposed stationary noise sources, or the expansion or alteration of an existing use, shall be mitigated so as not to exceed noise level standards (Table N-1) at noise-sensitive land uses. All noise generators not in compliance with these standards will be encouraged to mitigate impacts.
- N-2d **Acceptable noise levels.** New construction and retrofits at existing buildings shall include appropriate insulation, glazing, and other sound attenuation measures so that they comply with standards contained in Table N-1. These standards are intended to set levels for external noise sources that could potentially impact a new dwelling or other noise-sensitive use.

TABLE N-1 – NOISE STANDARDS FOR NEW PROJECTS AND RETROFITS

LAND USE	EXTERIOR			INTERIOR		
Noise Level Descriptor	7am-7pm	7-10 pm	10pm-7am	7am-7pm	7pm-10pm	10 pm-7am
Residences, Transient Lodging, Hospitals, Nursing Homes						
Hourly L_{eq}	55 dB	50 dB	45 dB	45 dB	40 dB	35 dB
Maximum	75 dB	75 dB	70 dB	65 dB	65 dB	60 dB
Auditoriums, Theaters, Libraries, Schools, Churches						
Hourly L_{eq}	55 dB	55 dB	n/a	40 dB	40 dB	n/a
Maximum	75 dB	75 dB	n/a	60 dB	60 dB	n/a

1. The City can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.
2. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).
3. The standards will be applied at the outdoor activity areas of the receiving land use, and at the building facade for upper floor receivers which do not have an outdoor activity area facing the noise source. Where no outdoor activity area is identified, the City has the option to apply only the interior noise level performance standards.

POLICY N-3 TRANSPORTATION NOISE SOURCES AND LEVELS

Objective. Establish acceptable noise levels, for land uses and activities, that will protect community residents from the harmful effects of excessive noise exposure due to transportation noise sources. Maintain interior and exterior noise standards that will achieve land use compatibility with respect to community noise.

N-3a **New development of noise-sensitive land uses.** New development of noise receptors will not be permitted in areas exposed to existing or projected levels of transportation noise exceeding levels specified in Table N-2, unless exterior noise or noise levels in interior spaces can be reduced to meet City Standards (Table N-2).

N-3b **Transportation noise.** Transportation noise sources shall be periodically measured, and significant increases mitigated, so as not to exceed the levels specified in Table N-2 for outdoor activity areas or interior spaces of existing receptors.

TABLE N-2 - MAXIMUM ALLOWABLE TRANSPORTATION NOISE SOURCES EXPOSURE

LAND USE	OUTDOOR ACTIVITY AREAS ¹ L _{dn} /CNEL, dB	INTERIOR SPACES	
		L _{dn} /CNEL, dB	L _{eq} , dB2
Residential	603	45	--
Transient Lodging	604	45	--
Hospitals, Nursing Homes	603	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	603	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

1. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
2. As determined for a typical worst-case hour during periods of use.
3. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.
4. In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

N-3c **Roadway projects.** To minimize noise impacts, the following criteria may be used as a test of significance for roadway projects:

1. Where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise receptors, a +5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.
2. Where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise receptors, a +3 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.
3. Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise receptors, a +1.5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.

POLICY N-4 ACOUSTICAL ANALYSIS REQUIREMENTS

Objective. Establish a consistent procedure and framework for conducting and reviewing acoustical analyses.

N-4a **Noise-sensitive land uses.** Where receptor land uses are potentially exposed to existing or projected exterior noise levels exceeding the levels specified in Table N-2 or the performance standards of Table N-1, an acoustical analysis shall be required as part of the environmental review process, so that noise mitigation may be included in the project design. An acoustical analysis prepared pursuant to the Noise Element shall:

1. Be the financial responsibility of the applicant.
2. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
3. Include noise level measurements, with sufficient sampling periods and locations, to adequately describe local conditions and the predominant noise sources.
4. Estimate existing and projected cumulative (twenty years) noise levels in terms of L_{dn} or CNEL and/or the standards of Table NI, and compare those levels to the adopted policies of the Noise Element.
5. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses.
6. Estimate noise exposure after prescribed mitigation measures are implemented.
7. Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

POLICY N-5 INTRUSIVE AND INTERMITTENT NOISE SOURCES

Objective. Protect community residents from the effects of excessive, intrusive, and intermittent noise. Set standards for intrusive and intermittent noise sources for both daytime and nighttime periods. Intrusive noise sources have a qualitative aspect that can be annoying. These sources may contain a tonal component which is absent from the existing general background noise. They may also be rhythmic, reoccurring or impulsive in nature, or comprised mainly of music or speech. Intrusive noise can result in annoyance or interference with sleep. These types of noise sources can include, but are not limited to, industrial processes, warning horns, backup alarms, and pressure release devices.

- N-5a **Intrusive noise.** When intrusive noise sources have been identified, the detrimental effects (sleep interference or the potential for annoyance) shall be disclosed to neighboring receptor properties.
- N-5b **Noise levels due to non-transportation sources.** Noise levels due to non-transportation sources which may be intermittent or recurring, impulsive noises, pure tones, or noises consisting primarily of speech or music, shall be subject to the criteria contained within Table N-1, with a -5 dB penalty applied to the criteria.
- N-5c **Rhythmic, reoccurring, or impulsive noise sources.** When noise sources have been identified to be rhythmic, reoccurring, or impulsive in nature or comprised mainly of music or speech, they may comply with applicable noise level criteria and still be annoying to individuals. When these types of noise sources have been identified, they may be subject to additional mitigation or mediation.
- N-5d **Construction site tool or equipment noise.** The following shall apply to construction noise from tools and equipment:
1. The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 7 P.M. Monday through Friday, and between 9 a.m. and 7 p.m. on Saturdays.
 2. No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- This shall apply to construction noise from tools and equipment which are subject to the review of the City, and which may affect receptor uses. This policy shall not apply to emergency work of public service utilities or by variance under a noise ordinance.
- N-5e **Stationary and construction equipment noise.** All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

- N-5f **Noise Ordinance.** The City of Arcata shall develop and adopt a City-wide noise ordinance. The ordinance shall contain noise level criteria consistent with the criteria contained within the noise element.

6.6 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE	RESPONSIBLE PARTY	TIME FRAME
N -1	Citywide and downtown noise ordinances Adopt a citywide noise ordinance to protect public health, safety, welfare, and quiet by reducing existing noise levels and prohibiting the generation of loud noise from new sources. Amend the existing downtown noise ordinance to be consistent with Noise Element standards.	Police Department	Year 1
N -2	Noise Control Manual Maintain and apply a Noise Control Manual that contains techniques for soundproofing new structures and muffling equipment and motors; promotes use of acoustic materials, barriers and setbacks; and requires acoustic analysis to determine potential noise impacts.	Community Development Department/ Planning Commission	Year 1
N -3	Education programs The City shall maintain current information about noise monitoring and attenuation techniques effective in identifying and reducing noise.	Community Development Dept.	Ongoing
N -4	Record of noise complaints The Arcata Police Department shall maintain a record of noise complaints.	Arcata Police Dept.	Ongoing
N -5	Noise reduction inquiry procedure The City recognizes that many noise issues can be resolved before they get to the complaint stage, if there is a procedure for airing the issue with an impartial third party.	Community Development Dept.	Year 1

The first part of the document discusses the importance of maintaining accurate records.

It is essential to ensure that all data is recorded correctly and consistently.

This section outlines the procedures for data collection and analysis.

The following table provides a summary of the key findings from the study.

Category	Value
Category 1	100
Category 2	200
Category 3	300
Category 4	400
Category 5	500

The results of the study indicate a significant correlation between the variables.

Further research is needed to explore the underlying mechanisms.

The study has several limitations that should be acknowledged.

Despite these limitations, the findings provide valuable insights into the topic.

The conclusions drawn from the study are as follows:

1. The first conclusion is that the data shows a clear trend.

2. The second conclusion is that the results are consistent across different groups.

3. The third conclusion is that the study has identified a new factor.

4. The fourth conclusion is that the findings have practical implications.

5. The fifth conclusion is that the study has contributed to the field.

Glossary

VIETNAM

GENERAL PLAN GLOSSARY

Acceptable Risk A hazard that is deemed to be a tolerable exposure to danger given the expected benefits to be obtained. Different levels of acceptable risk may be assigned according to the potential danger and the criticalness of the threatened structure. The levels may range from “near zero” for nuclear plants and natural gas transmission lines to “moderate” for open space, ranches and low-intensity warehouse uses.

Acres, Gross The entire acreage of a site. Gross acreage is calculated to the centerline of proposed bounding streets and to the edge of the right-of-way of existing or dedicated streets.

Acres, Net The portion of a site that can actually be built upon. The following generally are not included in the net acreage of a site: public or private road rights-of-way, public open space, and flood ways.

Adaptive Reuse The conversion of obsolescent or historic buildings from their original or most recent use to a new use. For example, the conversion of former hospital or school buildings to residential use, or the conversion of an historic single-family home to office use.

Affordable Housing Housing capable of being purchased or rented by a household with very low, low, or moderate income, based on a household's ability to make monthly payments necessary to obtain housing. “Affordable to low- and moderate-income households” means that at least twenty percent (20%) of the units in a development will be sold or rented to lower income households, and the remaining units to either lower or moderate income households. Housing units for lower income households must sell or rent for a monthly cost not greater than thirty percent (30%) of sixty percent (60%) of the area median income, as periodically established by HCD. Housing units for moderate income must sell or rent for a monthly cost not greater than 30 percent of area median income.

Agricultural Preserve Land designated for agriculture or conservation under the “Williamson Act.”

Agriculture Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

Agriculture-related Business Feed mills, dairy supplies, poultry processing, creameries, wineries, auction yards, veterinarians and other businesses supporting local agriculture.

Alquist-Priolo Act, Earthquake Fault Zone A state designated seismic hazard zone along traces of potentially and recently active faults, in which specialized geologic investigations must be prepared prior to approval of certain types of new development.

Ambient Surrounding on all sides; used to describe measurements of existing conditions with respect to traffic, noise, air and other environments.

Annex, v. To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

Apartment (1) One or more rooms of a building used as a place to live, in a building containing at least one other unit used for the same purpose. (2) A separate suite, not owner occupied, that includes kitchen facilities and is designed for and rented as the home, residence, or sleeping place of one or more persons living as a single housekeeping unit.

Aquifer An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Arable Land capable of being cultivated for farming.

Architectural Control; Architectural Review Regulations and procedures requiring the exterior design of structures to be suitable, harmonious, and in keeping with the general appearance, historic character, and/or style of surrounding areas. A process used to exercise control over the design of buildings and their settings. (See "Design Review.")

Arterial Medium-speed (30-40 mph), medium-capacity (10,000-35,000 average daily trips) roadway that provides intra-community travel and access to the county-wide highway system. Access to community arterials should be provided at collector roads and local streets, but direct access from parcels to existing arterials is common.

Assessment District (See "Benefit Assessment District.")

Assisted Housing Generally multi-family rental housing, but sometimes single-family ownership units, whose construction, financing, sales prices, or rents have been subsidized by federal, state, or local housing programs including, but not limited to Federal §8 (new construction, substantial rehabilitation, and loan management set-asides), Federal §§ 213, 236, and 202, Federal §221(d)(3) (below-market interest rate program), Federal §101 (rent supplement assistance), CDBG, FmHA §515, multi-family mortgage revenue bond programs, local redevelopment and *in lieu* fee programs, and units developed pursuant to local inclusionary housing and density bonus programs. By January 1, 1992, all California Housing Elements are required to address the preservation or replacement of assisted housing that is eligible to change to market rate housing by 2002.

Attainment Compliance with State and federal ambient air quality standards within an air basin. (See "Non-attainment.")

Base Flood In any given year, a 100-year flood that has a 1% likelihood of occurring, and is recognized as a standard for acceptable risk.

Baylands Areas along a bay that are permanently wet or periodically covered with shallow water, such as saltwater and freshwater marshes, open or closed brackish marshes, swamps, mudflats, and fans.

Bicycle Lane (Class II facility) A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Path (Class I facility) A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but typically are separated from them by landscaping.

Bicycle Route (Class III facility) A facility shared with motorists and identified only by signs, a bicycle route has no pavement markings or lane stripes.

Bikeways A term that encompasses bicycle lanes, bicycle paths, and bicycle routes.

Biodiversity. The variety of organisms considered at all levels, from genetic variants belonging to the same species, through arrays of species to arrays of genera, families, and still higher taxonomic levels; includes the variety of ecosystems, which comprise both the communities of organisms within particular habitats and the physical conditions under which they live.

Bond An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

Brownfield An area with abandoned, idle, or under-used industrial and commercial facilities where expansion, redevelopment, or reuse is complicated by real or perceived environmental contamination. (See "Greenfield.")

Buffer Zone An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

Buildout; Build-out Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations. (See "Carrying Capacity (3).")

Busway A vehicular right-of-way or portion thereof—often an exclusive lane—reserved exclusively for buses.

California Environmental Quality Act (CEQA) A State law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an Environmental Impact Report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project. General Plans require the preparation of a "program EIR."

Caltrans California Department of Transportation.

Capital Improvements Program (CIP) A program established by a city or county government and reviewed by its planning commission, which schedules permanent improvements, usually for a minimum of five years in the future, to fit the projected fiscal capability of the local jurisdiction. The program generally is reviewed annually, for conformance to and consistency with the general plan.

Carrying Capacity Used in determining the potential of an area to absorb development: (1) The level of land use, human activity, or development for a specific area that can be accommodated permanently without an irreversible change in the quality of air, water, land, or plant and animal habitats. (2) The upper limits of development beyond which the quality of human life, health, welfare, safety, or community character within an area will be impaired. (3) The maximum level of development allowable under current zoning. (See "Buildout.")

Central Business District (CBD) The major commercial downtown center of a community. General guidelines for delineating a downtown area are defined by the U.S. Census of Retail Trade, with specific boundaries being set by the local municipality.

Channelization (1) The straightening and/or deepening of a watercourse for purposes of storm-runoff control or ease of navigation. Channelization often includes lining of stream banks with a retaining material such as concrete. (2) At the intersection of roadways, the directional separation of traffic lanes through the use of curbs or raised islands that limit the paths that vehicles may take through the intersection.

City City with a capital "C" generally refers to the government or administration of a city. City with a lower case "c" may mean any city, or may refer to the geographical area of a city (e.g., the city's bikeway system.)

Clustered Development Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an open space area.

Collector Relatively-low-speed (25-30 mph), relatively-low-volume (5,000-20,000 average daily trips) street that provides circulation within and between neighborhoods. Collectors usually serve short trips and are intended for collecting trips from local streets and distributing them to the arterial network.

Commercial A land use classification that permits facilities for buying and selling of commodities and services.

Commercial Strip Commercial development, usually one store deep, that fronts on a major street for a distance of one city block or more. Includes individual buildings on their own lots, with or without on-site parking, and small linear shopping centers with shallow on-site parking in front of the stores.

Community Care Facility Elderly housing licensed by the State Health and Welfare Agency, Department of Social Services, typically for residents who are frail and need supervision. Services normally include three meals daily, housekeeping, security and emergency response, a full activities program, supervision in the dispensing of medicine, personal services such as assistance in grooming and bathing, but no nursing care. Sometimes referred to as residential care or personal care. (See "Congregate Care.")

Community Center A public facility where educational, therapeutic and/or recreational programs are provided.

Community Child Care Agency A non-profit agency established to organize community resources for the development and improvement of child care services.

Community Development Block Grant (CDBG) A grant program administered by the U.S. Department of Housing and Urban Development (HUD) on a formula basis for entitlement communities, and by the State Department of Housing and Community Development (HCD) for non-entitled jurisdictions such as Arcata. This grant allots money for housing rehabilitation and community development, including public facilities and economic development.

Community Noise Equivalent Level (CNEL) A 24-hour energy equivalent level derived from a variety of single-noise events, with weighting factors of 5 and 10 dBA applied to the evening (7 PM to 10 PM) and nighttime (10 PM to 7 AM) periods, respectively, to allow for the greater sensitivity to noise during these hours.

Community Park Land with full public access intended to provide recreation opportunities beyond those supplied by neighborhood parks. Community parks are larger in scale than neighborhood parks but smaller than regional parks.

Community Redevelopment Agency (CRA) A local agency created under California Redevelopment Law (Health & Safety code §33000, et. Seq.), or a local legislative body that has been elected to exercise the powers granted to such an agency, for the purpose of planning, developing, re-planning, redesigning, clearing, reconstructing, and/or rehabilitating all or part of a specified area with residential, commercial, industrial, and/or public (including recreational) structures and facilities. The redevelopment agency's plans must be compatible with adopted community general plans.

Community Service District (CSD) A geographic subarea of a city or county used for the planning and delivery of parks, recreation, and other human services based on an assessment of the service needs of the population in that subarea. The CSD is a taxation district with independent administration.

Condominium A structure of two or more units, the interior spaces of which are individually owned; the balance of the property (both land and building) is owned in common by the owners of the individual units. (See "Townhouse.")

Congestion Management Plan (CMP) A mechanism employing growth management techniques, including traffic level of service requirements, standards for public transit, trip reduction programs involving transportation systems management and jobs/ housing balance strategies, and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development.

Congregate Care Apartment housing, usually for seniors, in a group setting that includes independent living and sleeping accommodations in conjunction with shared dining and recreational facilities. (See "Community Care Facility.")

Consistency, Consistent With Free from significant variation or contradiction. The various diagrams, text, goals, policies, and programs in the general plan must be consistent with each other, not contradictory or preferential. The term "consistent with" is used interchangeably with "conformity with." The courts have held that the phrase "consistent with" means "agreement with; harmonious with." Webster defines "conformity with" as meaning harmony, agreement when used with "with." The term "conformity" means in harmony therewith or agreeable to (Sec 58 Ops.Cal.Atty.Gen. 21, 25 [1975]). California State law also requires that a general plan be internally consistent and also requires

consistency between a general plan and implementation measures such as the zoning ordinance. As a general rule, an action program or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment.

Construction Site. The area where new construction, or reconstructing, remodeling, or restoring of an existing structure or site is occurring. This includes the development site and onsite area used by the contractor. This does not include ongoing operations such as permitted industrial activities.

County County with a capital "C" generally refers to the government or administration of a county. County with a lower case "c" may mean any county, or may refer to the geographical area of a county (e.g., the county's road system.)

Covenants, Conditions, and Restrictions (CC&Rs) A term used to describe restrictive limitations that may be placed on property and its use, and which usually are made a condition of holding title or lease.

Critical Facility Facilities housing or serving many people, that are necessary in the event of an earthquake or flood, such as hospitals, fire, police, and emergency service facilities, utility "lifeline" facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

Cul-de-sac A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

Cumulative Impact As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

dB Decibel; a unit used to express the relative intensity of a sound as it is heard by the human ear.

dBA The "A-weighted" scale for measuring sound in decibels; weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness though the noise is actually ten times more intense.

Dedication The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Dedication, In lieu of Cash payments that may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot, and referred to as in lieu fees or in lieu contributions.

Defensible space (1) In fire-fighting and prevention, a 30-foot area of non-combustible surfaces separating urban and wildland areas. (2) In urban areas, open spaces, entry points, and pathways configured to provide maximum opportunities to rightful users and/or residents to defend themselves against intruders and criminal activity.

Density, Residential The number of permanent residential dwelling units per acre of land. Densities specified in the General Plan may be expressed in units per gross acre or per net developable acre. (See "Acres, Gross," and "Developable Acres, Net.")

Density Bonus The allocation of development rights that allow a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location. Under California law, a housing development that provides twenty percent (20%) of its units for lower income households, or ten percent of its units for very low-income households, or fifty percent (50%) of its units for seniors, is entitled to a density bonus. (See "Development Rights, Transfer of.")

Design Review; Design Control The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting, and signs, in accordance with a set of adopted criteria and standards. "Design Control" requires that certain specific things be done and that other things not be done. Design Control language is most often found within a zoning ordinance. "Design Review" usually refers to a system set up outside of the zoning ordinance, whereby projects are reviewed against certain standards and criteria by a specially established design review board or committee. (See "Architectural Control.")

Detention Dam/Basin/Pond Dams may be classified according to the broad function they serve, such as storage, diversion, or detention. Detention dams are constructed to retard flood runoff and minimize the effect of sudden floods. Detention dams fall into two main types. In one type, the water is temporarily stored, and released through an outlet structure at a rate that will not exceed the carrying capacity of the channel downstream. Often, the basins are planted with grass and used for open space or recreation in periods of dry weather. The other type, most often called a **Retention Pond**, allows for water to be held as long as possible and may or may not allow for the controlled release of water. In some cases, the water is allowed to seep into the permeable banks or gravel strata in the foundation. This latter type is sometimes called a **Water-Spreading Dam** or **Dike** because its main purpose is to recharge the underground water supply. Detention dams are also constructed to trap sediment. These are often called **Debris Dams**.

Developable Acres, Net The portion of a site that can be used for density calculations. Public or private road rights-of-way are not included in the net developable acreage of a site.

Developable Land Land that is suitable as a location for structures and that can be developed free of hazards to, and without disruption of, or significant impact on, natural resource areas.

Developer An individual who or business that prepares raw land for the construction of buildings or causes to be built physical building space for use primarily by others, and in which the preparation of the land or the creation of the building space is in itself a business and is not incidental to another business or activity.

Development The physical extension and/or construction of urban land uses. Development activities include: subdivision of land; construction or alteration of structures, roads, utilities, and other facilities; installation of septic systems; grading; deposit of refuse, debris, or fill materials; and clearing of natural vegetative cover (with the exception of agricultural activities). Routine repair and maintenance activities are exempted.

Development Agreement A legislatively-approved contract between a jurisdiction and a person having legal or equitable interest in real property within the jurisdiction (California Government Code §5865 et. seq.) that "freezes" certain rules, regulations, and policies applicable to development of a property for a specified period of time, usually in exchange for certain concessions by the owner.

Development Fee (See "Impact Fee.")

Development Rights The right to develop land by a land owner who maintains fee-simple ownership over the land or by a party other than the owner who has obtained the rights to develop. Such rights usually are expressed in terms of density allowed under existing zoning. For example, one development right may equal one unit of housing or may equal a specific number of square feet of gross floor area in one or more specified zone districts. (See "Interest, Fee" and "Interest, Less-than-fee," and "Transfer of Development Rights [TDR].")

Discretionary Decision As used in CEQA, an action taken by a governmental agency that calls for the exercise of judgment in deciding whether to approve and/or how to carry out a project.

District (1) An area of a city or county that has a unique character identifiable as different from surrounding areas because of distinctive architecture, streets, geographic features, culture, landmarks, activities, or land uses. (2) A portion of the territory of a city or county within which uniform zoning regulations and requirements apply; a zone.

Diversity Differences among otherwise similar elements that give them unique forms and qualities; e.g., housing diversity can be achieved by differences in unit size, tenure, or cost.

D_n Used interchangeably with L_{dn}.

Duplex A detached building under single ownership that is designed for occupation as the residence of two families living independently of each other.

Dwelling Unit A room or group of rooms (including sleeping, eating, cooking, and sanitation facilities, but not more than one kitchen), that constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis.

Easement Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

Easement, Conservation A tool for acquiring open space with less than full-fee purchase, whereby a public agency buys only certain specific rights from the land owner. These may be positive rights (providing the public with the opportunity to hunt, fish, hike, or ride over the land) or they may be restrictive rights (limiting the uses to which the land owner may devote the land in the future).

Easement, Scenic A tool that allows a public agency to use an owner's land for scenic enhancement, such as roadside landscaping or vista preservation.

Economic Development Committee (EDC) An agency charged with seeking economic development projects and economic expansion at higher employment densities.

Elderly Persons of age 62 and older. (See "Seniors.")

Elderly Housing Typically one- and two-bedroom apartments or condominiums designed to meet the needs of persons 62 years of age and older or, if more than 150 units, persons 55 years of age and older, and restricted to occupancy by them. (See also, "Congregate Care.")

Emergency Shelter A facility that provides immediate and short-term housing and supplemental services for the homeless. Shelters come in many sizes, but an optimum size is considered to be 20 to 40 beds. Supplemental services may include food, counseling, and access to other social programs. (See "Homeless" and "Transitional Housing.")

Eminent Domain The right of a public entity to acquire private property for public use by condemnation, and the payment of just compensation.

Emission Standard The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

Endangered Species A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes.

Environment CEQA defines environment as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."

Environmental Impact Report (EIR) A report required pursuant to the California Environmental Quality Act which assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts. (See "California Environmental Quality Act.")

Environmental Impact Statement (EIS) Under the National Environmental Policy Act, a statement on the effect of development proposals and other major actions that significantly affect the environment.

Erosion (1) The loosening and transportation of rock and soil debris by wind, rain, or running water. (2) The gradual wearing away of the upper layers of earth.

Exaction A contribution or payment required as an authorized development permit precondition; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

Expansive Soils Soils that swell when they absorb water and shrink as they dry.

Fair Market Rent The rent, including utility allowances, determined by the United States Department of Housing and Urban Development for purposes of administering the Section 8 Existing Housing Program.

Family (1) Two or more persons related by birth, marriage, or adoption [U.S. Bureau of the Census]. (2) An individual or a group of persons living together who constitute a bona fide single-family housekeeping unit in a dwelling unit, not including a fraternity, sorority, club, or other group of persons occupying a hotel, lodging house or institution of any kind [California].

Farmers Home Administration (FmHA) A federal agency providing loans and grants for improvement projects and low-income housing.

Fast-food Restaurant Any retail establishment intended primarily to provide short-order food services for on-site dining and/or take-out, including self-serve restaurants (excluding cafeterias where food is consumed on the premises), drive-in restaurants, and formula restaurants required by contract or other arrangement to offer standardized menus, ingredients, and fast-food preparation.

Fault A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Feasible Capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social, and technological factors.

Finding(s) The result(s) of an investigation and the evidentiary basis upon which decisions are made. Findings are used by government agents and bodies to justify action taken by the entity.

Fire Hazard Zone An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

Fire-resistive Able to withstand specified temperatures for a certain period of time, such as a one-hour fire wall; not fireproof.

Flood, 100-Year The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, chance of occurring in any given year.

Flood Insurance Rate Map (FIRM) For each community, the official map on which the Federal Insurance Administration has delineated areas of special flood hazard and the risk premium zones applicable to that community.

Floodplain The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the flood plain subject to a one percent chance of flooding in any given year is designated as an "area of special flood hazard" by the Federal Insurance Administration.

Floodway The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "base flood" without cumulatively increasing the water surface elevation more than one foot. No development is allowed in floodways.

Floor Area, Gross The sum of the horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the centerline of a wall separating two buildings, but not including any space where the floor-to-ceiling height is less than six feet.

Floor Area Ratio (FAR) The gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net sq. ft. of land area, a Floor Area Ratio of 1.0 will allow a maximum of 10,000 gross sq. ft. of building floor area to be built. On the same site, an FAR of 1.5 would allow 15,000 sq. ft. of floor area; an FAR of 2.0 would allow 20,000 sq. ft.; and an FAR of 0.5 would allow only 5,000 sq. ft. FARs typically are applied on a parcel-by-parcel basis as opposed to an average FAR for an entire land use or zoning district.

Footprint; Building Footprint The outline of a building at all of those points where it meets the ground.

Geologic Review The analysis of geologic hazards, including all potential seismic hazards, surface ruptures, liquefaction, landslides, mudslides, and the potential for erosion and sedimentation.

Geological Pertaining to rock or solid matter.

Goal A general, overall, and ultimate purpose, aim, or end toward which the City will direct effort.

Ground Failure Ground movement or rupture caused by strong shaking during an earthquake. Includes landslide, lateral spreading, liquefaction, and subsidence.

Ground Shaking Ground movement resulting from the transmission of seismic waves during an earthquake.

Groundwater Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks that provide underground storage ("aquifers").

Group Quarters A residential living arrangement in which six or more persons share living quarters and cooking facilities, or any residential structure containing six or more rooms which could be used as bedrooms.

Infilling Concentrating development in areas with existing infrastructure either in or adjacent to urban areas. Infilling is associated with high density development.

Institutional group quarters include nursing homes, orphanages, and prisons.

Non-institutional group quarters include dormitories, shelters, and large boarding houses.

Greenbelt A strip of land, in or adjacent to a city, that contains open space such as wetlands, natural resource lands, parks, farms, or vacant land.

Greenfield Undeveloped or even developed lands that do not have previously identified or suspected environmental contamination.

Growth Management The use by a community of a wide range of techniques in combination to determine the amount, type, and rate of development desired by the community and to channel that growth into designated areas. Growth management policies can be implemented through growth rates, zoning, capital improvement programs, public facilities ordinances, urban limit lines, standards for levels of service, and other programs. (See "Congestion Management Plan.")

Habitat The physical location or type of environment in which an organism or biological population lives or occurs.

Handicapped A person determined to have a physical impairment or mental disorder expected to be of long or indefinite duration. Many such impairments or disorders are of such a nature that a person's ability to live independently can be improved by appropriate housing conditions.

Hazardous Material Any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

Historical Preservation The preservation of historically significant structures and neighborhoods until such time as, and in order to facilitate, restoration and rehabilitation of the building(s) to a former condition.

Home Occupation A commercial activity conducted solely by the occupants of a particular dwelling unit in a manner incidental to residential occupancy.

Hotel A facility in which guest rooms or suites are offered to the general public for lodging with or without meals and for compensation, and where no provision is made for cooking in any individual guest room or suite. (See "Motel.")

Household All those persons—related or unrelated—who occupy a single housing unit. (See "Family.")

Households, Number of The count of all year-round housing units occupied by one or more persons. The concept of *household* is important because the formation of new households generates the demand for housing. Each new household formed creates the need for one additional housing unit or requires that one existing housing unit be shared by two households. Thus, household formation can continue to take place even without an increase in population, thereby increasing the demand for housing.

Housing and Community Development Department (HCD) The State agency that has principal responsibility for assessing, planning for, and assisting communities to meet the needs of low- and moderate-income households.

Housing Element One of the seven State-mandated elements of a local general plan, it assesses the existing and projected housing needs of all economic segments of the community, identifies potential sites adequate to provide the amount and kind of housing needed, and contains adopted goals, policies, and implementation programs for the preservation, improvement, and development of housing. Under State law, Housing Elements must be updated every five years.

Housing and Urban Development, U.S. Department of (HUD) A cabinet-level department of the federal government that administers housing and community development programs.

Housing Authority, Local (LHA) Local housing agency established in State law, subject to local activation and operation. Originally intended to manage certain federal subsidies, but vested with broad powers to develop and manage other forms of affordable housing.

Housing Unit The place of permanent or customary abode of a person or family. A housing unit may be a single-family dwelling, a multi-family dwelling, a condominium, a modular home, a mobile home, a cooperative, or any other residential unit considered real property under State law. A housing unit has, at least, cooking facilities, a bathroom, and a place to sleep. It also is a dwelling that cannot be moved without substantial damage or unreasonable cost. (See "Dwelling Unit," "Family," and "Household.")

Impact The effect of any direct man-made actions or indirect repercussions of man-made actions on existing physical, social, or economic conditions.

Impact Fee A fee, also called a development fee, levied by a city, county, or other public agency on the developer of a project as compensation for otherwise-unmitigated impacts the project will produce. §66000, et seq., specify that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Impervious Surface Surface through which water cannot penetrate, such as roof, road, sidewalk, and paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

Implementation Measure Actions, procedures, programs, or techniques that carry out policies.

Incineration The burning of refuse at high temperatures to reduce the volume of waste.

Inclusionary Zoning Provisions established by a public agency to require that a specific percentage of housing units in a project or development remain affordable to very low- and low-income households for a specified period.

Incubator Space Retail or industrial space that is affordable to new, low-margin businesses.

Industrial The manufacture, production, and processing of consumer goods. Industrial is often divided into “heavy industrial” uses, such as construction yards, quarrying, and factories; and “light industrial” uses, such as research and development and less intensive warehousing and manufacturing.

Infill Development Development of vacant land (usually individual lots or left-over properties) within areas that are already largely developed.

Infrastructure Public services and facilities, such as sewage-disposal systems, water-supply systems, other utility systems, and roads.

In Lieu Fee (See “Dedication, In lieu of.”)

Institutional Uses (1) Publicly or privately owned and operated activities such as hospitals, convalescent hospitals, intermediate care facilities, nursing homes, museums, and schools and colleges; (2) churches and other religious organizations; and (3) other non-profit activities of a welfare, educational, or philanthropic nature that cannot be considered residential, commercial, or industrial. (See “Public and Quasi-public Facilities.”)

Intensity, Building For residential uses, the actual number or the allowable range of dwelling units per net or gross acre. For non-residential uses, the actual or the maximum permitted floor area ratios (FARs).

Issues Important unsettled community matters or problems that are identified in a community's general plan and dealt with by the plan's goals, objectives, policies, plan proposals, and implementation programs.

Joint Powers Authority (JPA) A legal arrangement that enables two or more units of government to share authority in order to plan and carry out a specific program or set of programs that serves both units.

Land Banking The purchase of land by a local government for use or resale at a later date. “Banked lands” have been used for development of low- and moderate-income housing, expansion of parks, and development of industrial and commercial centers. Federal rail-banking law allows railroads to bank unused rail corridors for future rail use while allowing interim use as trails.

Landmark (1) A building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. (2) A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

Landslide Downslope movement of soil and/or rock, which typically occurs during an earthquake or following heavy rainfall.

Land Use Classification A system for classifying and designating the appropriate use of properties.

Lateral Spreading Lateral movement of soil, often as a result of liquefaction during an earthquake.

L_{dn} Day-Night Average Sound Level The A-weighted average sound level for a given area (measured in decibels) during a 24-hour period with a 10 dB weighting applied to night-time sound levels. The L_{dn} is approximately numerically equal to the CNEL for most environmental settings.

Lease A contractual agreement by which an owner of real property (the lessor) gives the right of possession to another (a lessee) for a specified period of time (term) and for a specified consideration (rent).

Leasehold Interest (1) The interest that the lessee has in the value of the lease itself in condemnation award determination. (2) The difference between the total remaining rent under the lease and the rent the lessee would currently pay for similar space for the same time period.

L_{eq} The energy equivalent level, defined as the average sound level on the basis of sound energy (or sound pressure squared). The L_{eq} is a "dosage" type measure and is the basis for the descriptors used in current standards, such as the 24-hour CNEL used by the State of California.

Level of Service (LOS) Standard A standard used by government agencies to measure the quality or effectiveness of a municipal service, such as police, fire, or library, or the performance of a facility, such as a street or highway.

Linkage With respect to jobs/housing balance, a program designed to offset the impact of employment on housing need within a community, whereby project approval is conditioned on the provision of housing units or the payment of an equivalent *in-lieu* fee. The linkage program must establish the cause-and-effect relationship between a new commercial or industrial development and the increased demand for housing.

Liquefaction The transformation of loose, wet soil from a solid to a liquid state, often as a result of ground shaking during an earthquake.

Live-work Quarters Buildings or spaces within buildings that are used jointly for commercial and residential purposes where the residential use of the space is secondary or accessory to the primary use as a place of work.

Local Agency Formation Commission (LAFCO) A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals. The LAFCO members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCOs include two representatives of special districts.

Local Coastal Program (LCP) A combination of a local government's land use plans, zoning ordinances, zoning district maps, and (within sensitive coastal resources areas) other implementing actions that together meet the local requirements of, and implement the provisions and policies of, the California Coastal Act of 1976.

Local Coastal Program Land Use Plan The relevant portion of a local government general plan or coastal element that details type, location, and intensity of land use, applicable resource protection and development policies, and, where necessary, implementation actions.

Low-income Household A household with an annual income usually no greater than 80 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development (HUD) for the §8 housing program. (See "Area.")

Low-income Housing Tax Credits Tax reductions provided by the federal and State governments for investors in housing for low-income households.

L_{10} A statistical descriptor indicating peak noise levels, i.e. the sound level exceeded ten percent (10%) of the time. It is a commonly used descriptor of community noise, and has been used in Federal Highway Administration standards and the standards of some cities and counties.

Manufactured Housing Residential structures that are constructed entirely in the factory, and which since June 15, 1976, have been regulated by the federal Manufactured Home Construction and Safety Standards Act of 1974 under the administration of the U.S. Department of Housing and Urban Development (HUD). (See “Mobile Home” and “Modular Unit.”)

May That which is permissible.

Mean Sea Level The average altitude of the sea surface for all tidal stages.

Median Strip The dividing area, either paved or landscaped, between opposing lanes of traffic on a roadway.

Mercalli Intensity Scale A subjective measure of the observed effects (human reactions, structural damage, geologic effects) of an earthquake. Expressed in Roman numerals from I to XII.

Microclimate The climate of a small, distinct area, such as a city street or a building's courtyard; can be favorably altered through functional landscaping, architecture, or other design features.

Mineral Resource Land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance, and is intended to help maintain the quarrying operations and protect them from encroachment of incompatible land uses.

Ministerial (Administrative) Decision An action taken by a governmental agency that follows established procedures and rules and does not call for the exercise of judgment in deciding whether to approve a project.

Mitigate, v. To ameliorate, alleviate, or avoid to the extent reasonably feasible.

Mixed-use Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A “single site” may include contiguous properties.

Mobile Home A structure, transportable in one or more sections, built on a permanent chassis and designed for use as a single-family dwelling unit and which (1) has a minimum of 400 square feet of living space; (2) has a minimum width in excess of 102 inches; (3) is connected to all available permanent utilities; and (4) is tied down (a) to a permanent foundation on a lot either owned or leased by the homeowner or (b) is set on piers, with wheels removed and skirted, in a mobile home park. (See “Manufactured Housing” and “Modular Unit.”)

Moderate-income Household A household with an annual income between the lower income eligibility limits and 120 percent of the area median family income adjusted by household size, usually as established by the U.S. Department of Housing and Urban Development (HUD) for the §8 housing program. (See “Area” and “Low-income Household.”)

Modular Unit A factory-fabricated, transportable building or major component designed for use by itself or for incorporation with similar units on-site into a structure for residential, commercial, educational, or industrial use. Differs from mobile homes and manufactured housing by (in addition to lacking an integral chassis or permanent hitch to allow future movement) being subject to California housing law design standards. California standards are more restrictive than federal standards in some respects (e.g., plumbing and energy conservation). Also called **Factory-built Housing** and regulated by State law of that title. (See “Mobile Home” and “Manufactured Housing.”)

Motel (1) A hotel for motorists. (2) A facility in which guest rooms or suites are offered to the general public for lodging with or without meals and for compensation, and where guest parking is provided in proximity to guest rooms. Quite often, provision is made for cooking in individual guest rooms or suites. (See “Hotel.”)

Multiple Family Building A detached building designed and used exclusively as a dwelling by three or more families occupying separate suites.

Multiplier Effect The recirculation of money through the economy multiplies its impact on jobs and income. For example, money paid as salaries to industrial and office workers is spent on housing, food, clothes and other locally-available goods and services. This spending creates jobs in housing construction, retail stores (e.g., grocery and drug stores) and professional offices. The wage paid to workers in those industries is again re-spent, creating still more jobs. Overall, one job in basic industry is estimated to create approximately one more job in non-basic industry.

Municipal Services Services traditionally provided by local government, including water and sewer, roads, parks, schools, and police and fire protection.

Must That which is mandatory.

National Ambient Air Quality Standards The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

National Environmental Policy Act (NEPA) An act passed in 1974 establishing federal legislation for national environmental policy, a council on environmental quality, and the requirements for environmental impact statements.

National Flood Insurance Program A federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

National Historic Preservation Act A 1966 federal law that established a National Register of Historic Places and the Advisory Council on Historic Preservation, and that authorized grants-in-aid for preserving historic properties.

National Register of Historic Places The official list, established by the National Historic Preservation Act, of sites, districts, buildings, structures, and objects significant in the nation's history or whose artistic or architectural value is unique.

Natural State The condition existing prior to development or alteration of a site.

Neighborhood A planning area commonly identified as such in a community's planning documents, and by the individuals residing and working within the neighborhood. Documentation may include a map prepared for planning purposes, on which the names and boundaries of the neighborhood are shown.

Neighborhood Park City- or county-owned land intended to serve the recreation needs of people living or working within one-half mile radius of the park.

Neighborhood Unit According to one widely-accepted concept of planning, the neighborhood unit should be the basic building block of the city. It is based on the elementary school, with other community facilities located at its center and arterial streets at its perimeter. The distance from the school to the perimeter should be a comfortable walking distance for a school-age child; there would be no through traffic uses. Limited industrial or commercial would occur on the perimeter where arterials intersect. This was a model for American suburban development after World War II.

Noise Any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. Noise, simply, is "unwanted sound."

Noise Attenuation Reduction of the level of a noise source using a substance, material, or surface, such as earth berms and/or solid concrete walls.

Noise Contour A line connecting points of equal noise level as measured on the same scale. Noise levels greater than the 60 L_{dn} contour (measured in dBA) require noise attenuation in residential development.

Non-attainment The condition of not achieving a desired or required level of performance. Frequently used in reference to air quality. (See "Attainment.")

Objective A specific measurable statement of desired future condition toward which a policy is directed. Where possible, objectives are time-specific. The State Government Code (§65302) requires that general plans spell out the "objectives," principles, standards, and proposals of the general plan. "The addition of 100 units of affordable housing by 2005" is an example of an objective.

Office Use The use of land by general business offices, medical and professional offices, administrative or headquarters offices for large wholesaling or manufacturing operations, and research and development.

Open Space Land Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Ordinance A law or regulation set forth and adopted by a governmental authority, usually a city or county.

Outdoor Recreation Use A privately or publicly owned or operated use providing facilities for outdoor recreation activities.

Overlay A land use designation on the General Plan Land Use Map, or a zoning designation on a zoning map, that modifies the basic underlying designation in some specific manner.

Parcel A lot in single ownership or under single control, usually considered a unit for purposes of development.

Park Land, Parkland Land that is publicly owned or controlled for the purpose of providing parks, recreation, or open space for public use.

Parking, Shared A public or private parking area used jointly by two or more uses.

Parking Area, Public An open area, excluding a street or other public way, used for the parking of automobiles and available to the public, whether for free or for compensation.

Parking Ratio The number of parking spaces provided per 1,000 square of floor area, e.g., 2:1 or "two per thousand."

Parks Open space lands whose primary purpose is recreation. (See "Open Space Land," "Community Park," and "Neighborhood Park.")

Parkway Strip A piece of land located between the rear of a curb and the front of a sidewalk, usually used for planting low ground cover and/or street trees, also known as "planter strip."

Performance Standards Zoning regulations that permit uses based on a particular set of standards of operation rather than on particular type of use. Performance standards provide specific criteria limiting noise, air pollution, emissions, odors, vibration, dust, dirt, glare, heat, fire hazards, wastes, traffic impacts, and visual impact of a use.

Planned Community A large-scale development whose essential features are a definable boundary; a consistent, but not necessarily uniform, character; overall control during the development process by a single development entity; private ownership of recreation amenities; and enforcement of covenants, conditions, and restrictions by a master community association.

Planned Development (PD) A description of a proposed unified development, consisting at a minimum of a map and adopted ordinance setting forth the regulations governing, and the location and phasing of all proposed uses and improvements to be included in the development.

Planning Area The area directly addressed by the general plan. A city's planning area typically encompasses the city limits, potentially annexable land within its sphere of influence, and surrounding lands which affect the City.

Planning Commission A body, usually having five or seven members, created by a city or county in compliance with California law (§65100) which requires the assignment of the planning functions of the city or county to a planning department, planning commission, hearing officers, and/or the legislative body itself, as deemed appropriate by the legislative body.

Policy A group of related actions or means that will be employed to achieve objectives.

Pollution, Non-Point Sources for pollution that are less definable and usually cover broad areas of land, such as agricultural land with fertilizers that are carried from the land by runoff, or automobiles.

Pollution, Point In reference to water quality, a discrete source from which pollution is generated before it enters receiving waters, such as a sewer outfall, a smokestack, or an industrial waste pipe.

Poverty Level As used by the U.S. Census, families and unrelated individuals are classified as being above or below the poverty level based on a poverty index that provides a range of income cutoffs or "poverty thresholds" varying by size of family, number of children, and age of householder. The income cutoffs are updated each year to reflect the change in the Consumer Price Index.

Preserve, n. An area in which beneficial uses in their present condition are protected; for example, a nature preserve or an agricultural preserve. (See "Agricultural Preserve" and "Protect.")

Prime Agricultural Land (1) Land used actively in the production of food, fiber, or livestock. (2) All land which qualifies for rating as Class I or Class II in the Natural Resources Conservation Service land use compatibility classifications. (3) Land which qualifies for rating 60 through 100 in the Storie Index Rating (See "Prime Farmland" and "Storie Index.").

Prime Farmland Land which has the best combination of physical and chemical characteristics for the production of crops. Prime Farmland must have been used for the production of irrigated crops within the last three years. Prime Farmland does not include publicly-owned lands for which there is an adopted policy preventing agricultural use. (See "Prime Agricultural Land.")

Principle An assumption, fundamental rule, or doctrine that will guide general plan policies, proposals, standards, and implementation measures. The State Government Code (§65302) requires that general plans spell out the objectives, principles, standards, and proposals of the general plan. "Adjacent land uses should be compatible with one another" is an example of a principle.

Private Road/Private Street Privately owned (and usually privately maintained) motor vehicle access that is not dedicated as a public street. Typically the owner posts a sign indicating that the street is private property and limits traffic in some fashion. For density calculation purposes, some jurisdictions exclude private roads when establishing the total acreage of the site; however, aisles within and driveways serving private parking lots are not considered private roads.

Program An organized activity carried out in response to adopted policy to achieve an objective. Programs establish the "who," "how" and "when" for carrying out the "what" and "where" of goals and objectives, subject to budgetary allocations of resources.

Public and Quasi-public Facilities Institutional, academic, governmental and community service uses, either owned publicly or operated by non-profit organizations, including private hospitals and cemeteries. (See "Institutional Uses.")

Public Services (See "Municipal Services.")

Reclamation The reuse of resources, usually those present in solid wastes or sewage.

Reconstruction As used in historic preservation, the process of reproducing by new construction the exact form and detail of a vanished structure, or part thereof, as it appeared during a specific period of time. Reconstruction is often undertaken when the property to be reconstructed is essential for understanding and interpreting the value of an historic district and sufficient documentation exists to insure an exact reproduction of the original.

Recreation, Active A type of recreation or activity that requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts and various forms of children's play equipment.

Recreation, Passive Type of recreation or activity that does not require the use of organized play areas.

Redevelop, v. To demolish existing buildings; or to increase the overall floor area existing on a property; or both; irrespective of whether a change occurs in land use.

Regional Pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

Rehabilitation The repair, preservation, and/or improvement of substandard housing.

Remodeling As used in historic preservation, making over or rebuilding all or part of an historic structure in a way that does not necessarily preserve its historical, architectural, and cultural features and character.

Research and Development Use A use engaged in study, testing, design, analysis, and experimental development of products, processes, or services.

Residential Land designated in the City or County General Plan and zoning ordinance for buildings consisting of dwelling units. May be improved, vacant, or unimproved. (See "Dwelling Unit.")

Residential Care Facility A facility that provides 24-hour care and supervision to its residents.

Residential, Multiple Family Usually three or more dwelling units on a single site, which may be in the same or separate buildings.

Residential, Single-Family A single dwelling unit on a building site.

Resources, Non-renewable Refers to natural resources, such as fossil fuels and natural gas, that, once used, cannot be replaced and used again.

Restore, v. To renew, rebuild, or reconstruct to a former state.

Restrict, v. To check, bound, or decrease the range, scope, or incidence of a particular condition.

Retention Basin/Retention Pond (See "Detention Basin/Detention Pond.")

Retrofit, v. To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. Buildings have been retrofitted to use solar energy and to strengthen their ability to withstand earthquakes, for example.

Rezoning An amendment to the map and/or text of a zoning ordinance to effect a change in the nature, density, or intensity of uses allowed in a zoning district and/or on a designated parcel or land area.

Richter Scale A measure of the size or energy release of an earthquake at its source. The scale is logarithmic; the wave amplitude of each number on the scale is ten times greater than that of the previous whole number.

Rideshare A travel mode other than driving alone, such as buses, rail transit, carpools, and vanpools.

Ridgeline A line connecting the highest points along a ridge and separating drainage basins or small-scale drainage systems from one another.

Right-of-way A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roads, railroads, and utility lines.

Riparian Lands Riparian lands are comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

Runoff That portion of rain or snow that does not percolate into the ground and is discharged into streams instead.

Sanitary Landfill The controlled placement of refuse within a limited area, followed by compaction and covering with a suitable thickness of earth and other containment material.

Sanitary Sewer A system of subterranean conduits that carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (that carry surface water) and septic tanks or leech fields (that hold refuse liquids and waste matter on-site). (See "Combined Sewer" and "Septic System.")

Scenic Highway Corridor The area outside a highway right-of-way that is generally visible to persons traveling on the highway.

Scenic Highway/Scenic Route A highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and man-made scenic resources and access or direct views to areas or scenes of exceptional beauty or historic or cultural interest. The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising. Until the mid-1980s, general plans in California were required to include a Scenic Highways element.

Second Unit A Self-contained living unit, either attached to or detached from, and in addition to, the primary residential unit on a single lot. "Granny Flat" is one type of a second unit.

Seiche An earthquake-generated wave in an enclosed body of water such as a lake, reservoir, or bay.

Seismic Caused by or subject to earthquakes or earth vibrations.

Seniors Persons of age 62-years and older. (See "Elderly.")

Senior Housing (See "Elderly Housing.")

Septic System A sewage-treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absence of oxygen. Septic systems are often used for individual-home waste disposal where an urban sewer system is not available. (See "Sanitary Sewer.")

Setback The horizontal distance between the property line and any structure.

Settlement 1. The drop in elevation of a ground surface caused by settling or compacting. 2. The gradual downward movement of an engineered structure due to compaction. *Differential* settlement is uneven settlement, where one part of a structure settles more or at a different rate than another part.

Shall That which is mandatory; an unequivocal direction.

Shared Living The occupancy of a dwelling unit by persons of more than one family in order to reduce housing expenses and provide social contact, mutual support, and assistance. Shared living facilities serving six or fewer persons are permitted in all residential districts by §1566.3 of the California Health and Safety Code.

Should Signifies a directive to be honored if at all possible; a less rigid directive than "shall," to be honored in the absence of compelling or contravening considerations.

Sign Any representation (written or pictorial) used to convey information, or to identify, announce, or otherwise direct attention to a business, profession, commodity, service, or entertainment, and placed on, suspended from, or in any way attached to, any structure, vehicle, or feature of the natural or manmade landscape.

Significance As used in historic preservation, a term ascribed to buildings, sites, objects, or districts that possess exceptional value or quality for illustrating or interpreting the cultural heritage of the community when evaluated in relation to other properties and property types within a specific historic theme, period, and geographical setting. A principal test of significance for historic property is "integrity."

Significant Effect A beneficial or detrimental impact on the environment. May include, but is not limited to, significant changes in an area's air, water, and land resources.

Siltation (1) The accumulating deposition of eroded material. (2) The gradual filling in of streams and other bodies of water with sand, silt, and clay.

Single-family Dwelling, Attached A dwelling unit occupied or intended for occupancy by only one household that is structurally connected with at least one other such dwelling unit. (See "Townhouse.")

Single-family Dwelling, Detached A dwelling unit occupied or intended for occupancy by only one household that is structurally independent from any other such dwelling unit or structure intended for residential or other use.

Solar Access The provision of direct sunlight to an area specified for solar energy collection when the sun's azimuth is within 45 degrees of true south.

Solar System, Active A system using a mechanical device, such as a pump or a fan, and energy in addition to solar energy to transport a conductive medium (air or water) between a solar collector and the interior of a building for the purpose of heating or cooling.

Solar System, Passive A system that uses direct heat transfer from thermal mass instead of mechanical power to distribute collected heat. Passive systems rely on building design and materials to collect and store heat and to create natural ventilation for cooling.

Solid Waste Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials. Organic wastes and paper products comprise about 75% of typical urban solid waste.

Sphere of Influence The probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission (LAFCO) of the County.

Standard A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. The State Government Code (§65302) requires that general plans spell out the objectives, principles, "standards," and proposals of the general plan. Examples of standards might include "five acres of park land per 1,000 population," the traffic "Level of Service" (LOS) C, or a residential density standard of two units per acre.

Storie Index A numerical system (0–100) rating the degree to which a particular soil can grow plants or produce crops, based on four factors: soil profile, surface texture, slope, and soil limitations. (See "Prime Agricultural Land.")

Storm Runoff Surplus surface water generated by rainfall that does not seep into the earth but flows overland to flowing or stagnant bodies of water.

Street Furniture Those features associated with a street that are intended to enhance that street's physical character and use by pedestrians, such as benches, trash receptacles, kiosks, lights, newspaper racks.

Street Tree Plan A comprehensive plan for all trees on public streets that sets goals for solar access, and standards for species selection, maintenance, and replacement criteria, and for planting trees in patterns that will define neighborhood character while avoiding monotony or maintenance problems.

Streets, Local (See "Streets, Minor.")

Streets, Major The transportation network that includes a hierarchy of freeways, arterials, and collectors to service through traffic.

Streets, Minor Local streets not shown on the Circulation Plan, Map, or Diagram, whose primary intended purpose is to provide access to fronting properties.

Streets, Through Streets that extend continuously between other major streets in the community.

Structure Anything constructed or erected that requires location on the ground (excluding swimming pools, fences, and walls used as fences).

Subdivision The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. "Subdivision" includes a condominium project as defined in §1350 of the California Civil Code and a community apartment project as defined in §11004 of the Business and Professions Code.

Subdivision Map Act Division 2 (§66410 et seq.) of the California Government code, this act vests in local legislative bodies the regulation and control of the design and improvement of subdivisions, including the requirement for tentative and final maps. (See "Subdivision.")

Subregional Pertaining to a portion of a region.

Subsidence The sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence may be caused by a variety of human and natural activity, including earthquakes. (See "Settlement.")

Subsidize To assist by payment of a sum of money or by the granting of terms or favors that reduce the need for monetary expenditures. Housing subsidies may take the forms of mortgage interest deductions or tax credits from federal and/or state income taxes, sale or lease at less than market value of land to be used for the construction of housing, payments to supplement a minimum affordable rent, and the like.

Substandard Housing Residential dwellings that, because of their physical condition, do not provide safe and sanitary housing.

Substantial Considerable in importance, value, degree, or amount.

Sustainability Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Sustainable Development Development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. (Source: Minnesota State Legislature.)

Taking A real estate term traditionally used to mean acquisition by eminent domain but broadened by the U.S. Supreme Court to mean any government action that denies all economically viable use of property.

Target Areas Specifically designated sections of the community where loans and grants are made to bring about a specific outcome, such as the rehabilitation of housing affordable by very low- and low-income households.

Tax Increment Additional tax revenues that result from increases in property values within a redevelopment area. State law permits the tax increment to be earmarked for redevelopment purposes but requires at least 20% to be used to increase and improve the community's supply of very low- and low-income housing.

Telecommuting An arrangement in which a worker is at home or in a location other than the primary place of work, and communicates with the workplace and conducts work via wireless or telephone lines, using modems, fax machines, or other electronic devices in conjunction with computers.

Topography Configuration of a surface, including its relief and the position of natural and man-made features.

Tourism The business of providing services for persons traveling for pleasure, tourism contributes to the vitality of the community by providing revenue to local business. Tourism can be measured through changes in the transient occupancy tax, or restaurant sales.

Townhouse; Townhome A one-family dwelling in a row of at least three such units in which each unit has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from any other unit by one or more common and fire-resistant walls. Townhouses usually have separate utilities; however, in some condominium situations, common areas are serviced by utilities purchased by a homeowners association on behalf of all townhouse members of the association. (See "Condominium.")

Traffic Model A mathematical representation of traffic movement within an area or region based on observed

relationships between the kind and intensity of development in specific areas. Many traffic models operate on the theory that trips are produced by persons living in residential areas and are attracted by various non-residential land uses. (See "Trip.")

Transit The conveyance of persons or goods from one place to another by means of a local, public transportation system.

Transit, Public A system of regularly-scheduled buses and/or trains available to the public on a fee-per-ride basis. Also called "Mass Transit."

Transition Zone Controlled airspace extending upward from 700 or more feet above the ground wherein procedures for aircraft approach have been designated. The transition zone lies closer to an airport than the outer approach zone and outside of the inner approach zone. (See "Approach Zone" and "Outer Approach Zone.")

Transitional Housing Shelter provided to the homeless for an extended period, often as long as 18 months, and generally integrated with other social services and counseling programs to assist in the transition to self-sufficiency through the acquisition of a stable income and permanent housing. (See "Homeless" and "Emergency Shelter.")

Transportation Demand Management (TDM) A strategy for reducing demand on the road system by reducing the number of vehicles using the roadways and/or increasing the number of persons per vehicle. TDM attempts to reduce the number of persons who drive alone on the roadway during the commute period and to increase the number in carpools, vanpools, buses and trains, walking, and biking. TDM can be an element of TSM (see below).

Trees, Landmark Trees whose size, visual impact, or association with a historically significant structure or event have led the City or County to designate them as landmarks.

Trees, Street Trees strategically planted usually in parkway strips, medians, or along streets to enhance the visual quality of a street.

Trip A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one "production end," (or origin—often from home, but not always), and one "attraction end," (destination). (See "Traffic Model.")

Trip Generation The dynamics that account for people making trips in automobiles or by means of public transportation. Trip generation is the basis for estimating the level of use for a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system. Trip generations of households are correlated with destinations that attract household members for specific purposes.

Truck Route A path of circulation required for all vehicles exceeding set weight or axle limits, a truck route follows major arterials through commercial or industrial areas and avoids sensitive areas.

Tsunami A large ocean wave generated by an earthquake in or near the ocean.

Undevelopable Specific areas where topographic, geologic, and/or surficial soil conditions indicate a significant danger to future occupants and a liability to the City or County are designated as "undevelopable" by the City or County.

Uniform Building Code (UBC) A national, standard building code that sets forth minimum standards for construction.

Uniform Housing Code (UHC) State housing regulations governing the condition of habitable structures with regard to health and safety standards, and which provide for the conservation and rehabilitation of housing in accordance with the Uniform Building Code (UBC).

Urban Of, relating to, characteristic of, or constituting a city. Urban areas are generally characterized by moderate and higher density residential development (i.e., three or more dwelling units per acre), commercial development, and industrial development, and the availability of public services required for that development, specifically central water and sewer, an extensive road network, public transit, and other such services (e.g., safety and emergency response). Development not providing such services may be “non-urban” or “rural.” (See “Urban Land Use.”) CEQA defines “urbanized area” as an area that has a population density of at least 1,000 persons per square mile - (Public Resources Code §21080.14(b)).

Urban Design The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass, and design of various urban components and combines elements of urban planning, architecture, and landscape architecture.

Urban Growth Boundary An officially adopted and mapped line dividing land to be developed from land to be protected for natural or rural uses. Urban growth boundaries are regulatory tools, often designated for long periods of time (20 or more years) to provide greater certainty for both development and conservation goals. (Source: *Greenbelt Alliance*.)

Urban Land Use Residential, commercial, or industrial land use in areas where urban services are available.

Urban Services Boundary A boundary, sometimes parcel-specific, located to mark the outer limit beyond which urban development will not be allowed. It has the aim of discouraging urban sprawl by containing urban development during a specified period, and its location may be modified over time.

Urban Open Space The absence of buildings or development, usually in well-defined volumes, within an urban environment.

Urban Service Area (1) An area in which urban services will be provided and outside of which such services will not be extended. (2) Developed, undeveloped, or agricultural land, either incorporated or unincorporated, within the sphere of influence of a city, which is served or will be served during the first five years of an adopted capital improvement program by urban facilities, utilities, and services. The boundary around an urban service area is called the “urban service area boundary” and is to be developed in cooperation with a city and adopted by a Local Agency Formation Commission (LAFCO). (§56080.)

Urban Services Utilities (such as water, gas, electricity, and sewer) and public services (such as police, fire, schools, parks, and recreation) provided to an urbanized or urbanizing area

Urban Sprawl Haphazard growth or outward extension of a city resulting from uncontrolled or poorly managed development.

Use The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged in accordance with the City or County zoning ordinance and General Plan land use designations.

Utility Corridors Rights-of-way or easements for utility lines on either publicly or privately owned property. (See “Right-of-way” or “Easement.”)

Vehicle-Miles Traveled (VMT) A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

Very Low-income Household A household with an annual income usually no greater than 50 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development (HUD) for the §8 housing program.

View Corridor The line of sight—identified as to height, width, and distance—of an observer looking toward an object of significance to the community (e.g., ridgeline, river, historic building, etc.); the route that directs the viewers attention.

Viewshed The area within view from a defined observation point.

Volume-to-Capacity Ratio A measure of the operating capacity of a roadway or intersection, in terms of the number of vehicles passing through, divided by the number of vehicles that theoretically could pass through when the roadway or intersection is operating at its designed capacity. Abbreviated as " V/C ." At a V/C ratio of 1.0, the roadway or intersection is operating at capacity. If the ratio is less than 1.0, the traffic facility has additional capacity. Although ratios slightly greater than 1.0 are possible, it is more likely that the peak hour will elongate into a "peak period." (See "Peak Hour" and "Level of Service.")

Warehousing Use A use engaged in storage, wholesale, and distribution of manufactured products, supplies, and equipment, excluding bulk storage of materials that are flammable or explosive or that present hazards or conditions commonly recognized as offensive.

Watercourse Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

Watershed The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

Wetlands Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. Under a "unified" methodology now used by all federal agencies, wetlands are defined as "those areas meeting certain criteria for hydrology, vegetation, and soils."

Wilderness Areas Uncultivated and unimproved areas which are not readily accessible.

Wildlife Animals or plants existing in their natural habitat.

Wildlife Refuge An area maintained in a natural state for the preservation of both animal and plant life.

Williamson Act Known formally as the California Land Conservation Act of 1965, it was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its conversion to urban and suburban development. The program entails a ten-year contract between the City or County and an owner of land whereby the land is taxed on the basis of its agricultural use rather than its market value. The land becomes subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement.

Woodlands Lands covered with woods or trees.

Zone, Combining A special purpose zone that is superimposed over the regular zoning map. Combining zones are used for a variety of purposes, such as airport compatibility, flood plain or wetlands protection, historic designation, or special parking regulations. Also called "overlay zone."

Zone, Interim A zoning designation that temporarily reduces or freezes allowable development in an area until a permanent classification can be fixed; generally assigned during General Plan preparation to provide a basis for permanent zoning.

Zone, Traffic Analysis (TAZ) In a mathematical traffic model the area to be studied is divided into zones, with each zone treated as producing and attracting trips. The production of trips by a zone is based on the number of trips to or from work or shopping, or other trips produced per dwelling unit.

Zoning The division of a city or county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the General Plan.

Zoning Map Government Code §65851 permits a legislative body to divide a county, a city, or portions thereof, into zones of the number, shape, and area it deems best suited to carry out the purposes of the zoning ordinance. These zones are delineated on a map or maps, called the Zoning Map.

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